Pennsylvania Department of Environmental Protection

2 Public Square
Wilkes-Barre, PA 18711-0790
February 11, 2010

Northeast Regional Office

570-826-2511
Fax 570-820-4907

CERTIFIED MAIL NO.: 7008 3230 0002 4876 6912

Mr. [redacted]

Re: Final Report Approval
[redacted] Property
Well 5 – June 3, 2008 Diesel Fuel Release
Site # 706901, Primary Facility # 707295,
Remediation Id #, 39259,
366 Herb Button Road
Springville Township, Susquehanna County

Dear Mr. [redacted]

I am pleased to inform you that the Final Report for the site named above has been approved.

The Department of Environmental Protection (Department) has reviewed the Final Report, dated November 3, 2009, for the property located in the Springville Township, Susquehanna County. The report was submitted by URS Corporation. The report was submitted in accordance with the Land Recycling and Environmental Remediation Standards Act (Act 2), and constitutes a "Final Report" as defined in Chapter 3, Section 303 of Act 2.

The report was submitted to address the release of approximately 800-gallons of diesel fuel that occurred as a result of a break in a hose that supplied diesel fuel to the drill rig and booster. The release occurred on June 3, 2008 which impacted soil at the property. The report was also submitted to document the remediation of soil to the residential Statewide health standard under Act 2.

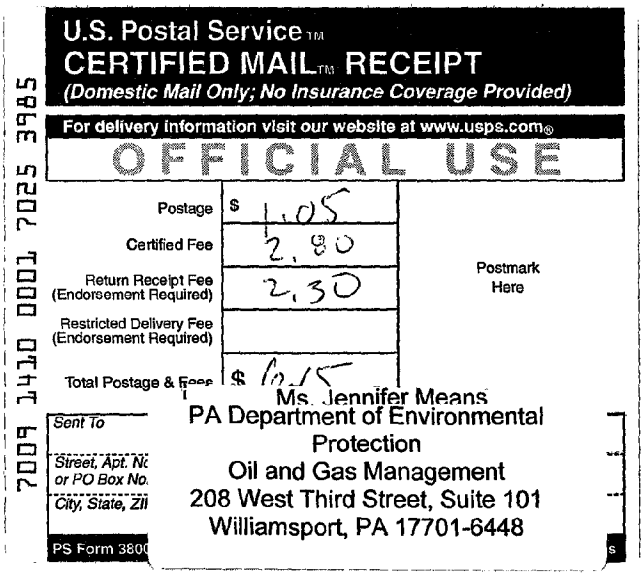
The Department approves this report for the substances identified and remediated to an Act 2 standard within the site(s) specified. Chapter 5, Section 501 of Act 2, provides the liability protection where attainment of Act 2 cleanup standard(s) is demonstrated. Cleanup liability protection provided by this chapter applies to the current and future owner or any other person who participated in the remediation, to a person who develops or occupies the site, to a successor or assign of any person to whom liability protection applies, and to a public utility to the extent the public utility performs activities on the identified site.

The technical review of this report was conducted under the responsible charge of a Pennsylvania Licensed Professional Geologist.

Sincerely,

Ronald S. Brezinski
Program Manager
Environmental Cleanup Program

cc: Cabot Oil and Gas Corp.
Gas Search Drilling Services
Ms. Shirley Cokely, Secretary/Springville Township
Mr. James Pinta/URS Corporation



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Sent To: Ms. Jennifer Means
PA Department of Environmental Protection
Oil and Gas Management
208 West Third Street, Suite 101
Williamsport, PA 17701-6448

Street, Apt. No. or PO Box No.

City, State, ZIP

PS Form 3800

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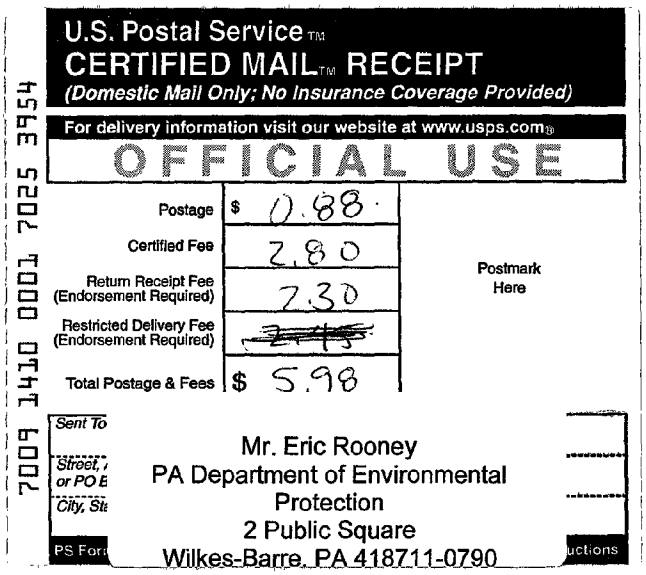
PS Form 3800, August 2006 *(Reverse)* PSN 7530-02-000-9047



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Mr. Eric Rooney
PA Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 418711-0790

PS Form ... uctions

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Mr. James Pinta, Jr.
URS Corporation
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

CABOT-EPA 007801

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DIM0206037

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
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1. Article Addressed to:

Mr. Eric Rooney
PA Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18711-0790

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

RECEIVED
FEB 5 - 2010
DEPARTMENT OF ENVIRONMENTAL PROTECTION

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 1410 0001 7025 3954

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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Mr. James Pinta, Jr.
URS Corporation
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

CABOT-EPA 007803

DIM0206031

DIM0206039

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1. Article Addressed to:

Ms. Jennifer Means
PA Department of Environmental Protection
Oil and Gas Management
208 West Third Street, Suite 101
Williamsport, PA 17701-6448

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (*Printed Name*) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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FEB - 9 2006
DEP-RECEPTION

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number (*Transfer from service label*) 7009 1410 0001 7025 3985

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

URS

February 2, 2010 *VIA CERTIFIED MAIL # 7009-1410-0001-7025-3954*

Mr. Eric M. Rooney
Site Project Officer
Pennsylvania Department of Environmental Protection
2 Public Square
Wilkes-Barre, Pennsylvania 18711-0790

Subject: **Disposal Documentation - Final Report Submission –**
[redacted] Property – Well #5
Primary Facility #707295, eFacts Site #706901, Remediation #39259
Herb Button Road,
Springville Township, Susquehanna County, Pennsylvania

Dear Mr. Rooney:

In response to your request dated January 4, 2010, on behalf of GasSearch Drilling Services Corporation (GDS), please find the enclosed documentation to complete the Final Report for the [redacted] Property, Well #5 described above:

- Disposal documentation for diesel and absorbents (28 containers); and
- Disposal documentation for impacted water and sediment collected in a frac tank (3,634 gallons).

Please let me know if you need any additional information.

Yours truly,
URS CORPORATION

James Pinta, Jr., Ph.D., P.G.
Principal Geologist

Enclosures

cc: Mr. Kevin Rogier – GasSearch Drilling Services Corporation
Mr. Phillip Stalnaker – Cabot Oil & Gas Corporation

Ms. Jennifer Means, Program Manager
Pennsylvania Department of Environmental Protection
Oil and Gas Management Program
Northcentral Regional Office
208 West Third Street, Suite 101
Williamsport, PA 17701-6448
Certified Mail # 7009-1410-0001-7025-3985

URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220
412-503-4700

HAZLETON OIL & ENVIRONMENTAL, Inc.
"Your Recycling Partner"

PA DEP # 301295
EPA # PA0000101816
NY PERMIT # PA395

№ 48370

300 Tamaqua Street
Hazleton, PA 18201-7913
Phone: 800-458-3496
Fax: 570-929-3048
E-mail: info@hazletonoil.com
Web: www.hazletonoil.com

WORK ORDER

IMPORTANT DOCUMENT FOR YOUR FILES
HAZLETON OIL & ENVIRONMENTAL, INC. TAKES FULL RESPONSIBILITY for the pickup, transportation and disposal of all waste accepted by our company.

Company	Date	Job Site
CGE Environmental PO Box 75 - RR 1 Box 2381 Montrose PA 18801	9/18/08	[redacted] Property [redacted] Well #5 Gas Search Drilling Inc Cabot Oil & Gas Inc Fuel Oil Spill June 2 2008
Contact		
Phone		
Time Arrived 11:15		
Driver [illegible]	Time Finished 2:15	Vehicle 08 ML

Quantity	Description	Price	Total
3634	Waste water and #2 oil pumped from truck tank		
	Wash Bay		

Halogen Test: Y N Results _____ PPM

Driver Signature if COD	Check if Cash	Check Number	Net 30 DAYS	Total

Accepted by: Please Sign: [signature] CGE Project Mgr Accepted by: Please Print Charles Gryson CGE Project Mgr

Generator Certified this waste oil:
- Is not flammable.
- Is not mixed with chlorinated solvents/cleaners.
- Has not been mixed with hazardous waste/PCBs.
- Does not exhibit any characteristics under 40 CFR 261, ref 24 PA code 261 a.1.

Is not mixed with hazardous waste according to 25 PA. Code 298. 10(b)(2)(iii).

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number: EXEMPT	2. Page 1 of: 1	3. Emergency Response Phone: (570) 278-8362	4. Waste Tracking Number: 06001

5. Generator's Name and Mailing Address: Gas Search Drilling Service, Inc.
466 Airport Industrial Park Rd.
Parkersburg, WV 26104

Generator's Site Address (if different than mailing address): #5[redacted] Gas Well Rig #9
Dimock, PA 18816

Generator's Phone: (570) 278-4589

6. Transporter 1 Company Name: Waste Recovery Solutions, Inc.
U.S. EPA ID Number: PAR000043026

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Waste Recovery Solutions, Inc.
343 King Street
Myerstown, PA 17067
U.S. EPA ID Number: PAR000043026

Facility's Phone: (717) 866-6955

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.
1.	Non-RCRA/Non-DOT materials (diesel fuel & absorbents)	028	DM	5600	P
2.					
3.					
4.					

13. Special Handling Instructions and Additional Information: (a) ; Diesel Fuel & Absorbents; LFI-

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Charles Gayson CGE Project Mgr
Signature:
Month: 07 Day: 14 Year: 08

15. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Dennis Lynch
Signature:
Month: 07 Day: 14 Year: 08

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

17. Discrepancy

17a. Discrepancy Indication Space: ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number:

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Gizelle Kauffman
Signature:
Month: 7 Day: 14 Year: 08

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

169-BLS-C 6 10497 (Rev. 6/06) DESIGNATED FACILITY TO GENERATOR

CABOT-EPA 007807

DIM0206031 DIM0206043

Pennsylvania Department of Environmental Protection

2 Public Square
Wilkes-Barre, PA 18711-0790
January 4, 2010

Northeast Regional Office

570-826-2511
Fax 570-820-4907

CERTIFIED MAIL NO.: 7008 3230 0002 4876 5977

Mr. [redacted]

ECP - Special Projects - Act 2
Comments on Final Report
[redacted] # 5 Well Site June 3, 2008 Diesel Fuel Release
eFACTS Site # 706901, Primary Facility # 707295,
Remediation # 39259
366 Herb Button Road
Springville Township, Susquehanna County

Dear Mr. [redacted]

The Department of Environmental Protection has reviewed the Final Report submitted on November 5, 2009 for the above-mentioned property. This letter is being provided to you to officially document the Department's response as per Section 303(h)(3) of the Land Recycling and Environmental Remediation Standards (Act 2). Based on the Department's review, we have the following comments:

- In order to confirm that the contamination at the site was properly disposed of, the Department is requesting a copy of the disposal manifests for the free phase product and contaminated groundwater removed from the site.

In order for your site to be in compliance with applicable requirements of Act 2, these items must be addressed. The Department is willing to work with you to develop an approvable submittal.

Thank you for your cooperation in working with the Department in the remediation of this site. If you need additional information or have any questions, please do not hesitate to call me at 570-830-3028.

Sincerely,

Eric M. Rooney
Geologic Specialist
Environmental Cleanup Program

Reviewer Oversight:

Thomas M. Thompson, P.G.
Professional Geologist Manager
Environmental Cleanup Program

cc. Cabot Oil and Gas Corp.
Gas Search Drilling Services
Ms. Shirley Cokely, Secretary/Springville Township
Mr. James Pinta/URS Corporation

URS

FILE COPY

November 3, 2009

Mr. Eric M. Rooney
Site Project Officer
Pennsylvania Department of Environmental Protection
2 Public Square
Wilkes-Barre, Pennsylvania 18711-0790

Subject: **Final Report Submission –**
[redacted] Property – Well #5
Primary Facility #707295, eFacts Site #706901, Remediation #39259
Herb Button Road,
Springville Township, Susquehanna County, Pennsylvania

Dear Mr. Rooney:

On behalf of GasSearch Drilling Services Corporation (GDS), please find a check in the amount of $250 and the Final Report describing the remedial activities, demonstration of attainment of the Statewide Health Standard, and request for relief from liability under Pennsylvania Act 2 implemented at the [redacted] Property Well #5 site in Springville, Pennsylvania.

Please note that a copy of the Notice of Intent to Remediate (NIR) and notification of submission of the NIR have been submitted to the Springville Township Supervisors. Proof of publication of the newspaper legal advertisements for submission of the NIR and the Final Report will be sent upon receipt from the ***Susquehanna Independent Weekender.***

Should there be any questions or should you require further information regarding this submission, please contact me at 412-503-4602 if you have any questions.

Yours truly,

URS CORPORATION

James Pinta, Jr., Ph.D., P.G.
Principal Geologist

Enclosure: Final Report (2 copies)

cc: Mr. Kevin Rogier – GasSearch Drilling Services Corporation
Mr. Phillip Stalnaker – Cabot Oil & Gas Corporation

URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220
412-503-4700

2530-FM-BWM0023 Rev. 1/2004

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

Land Recycling Program
Transmittal Sheet for Plan/Report Submission

Instructions: Please provide all requested information in each of the four sections. This transmittal sheet shall accompany any plan/report submitted to the Department under the Land Recycling Program. Proper completion of the Transmittal Sheet will assist Department review and may avoid a finding of plan/report deficiency. The Facility ID number can be obtained from the Department's Environmental Cleanup Program in the region where the site is located.

Section 1 - Site Identification

eFACTS Facility ID 706901

Site Name [redacted] Property Well #5

Site Address Herb Button Road, Springville, PA 18801

Municipality and County Springville Township, Susquehanna County

Section 2 - Remediation Standard . . Plan/Report . . Fees

Identify the remediation standard being pursued and the type of plan/report being submitted. Please note required Department fees follow each type of plan/report.

Check the relevant standard and the type of plan/report being submitted:

- ☐ Background Standard
  Final Report ($250 fee)
- ☐ Site-Specific Standard
  - ☐ Remedial Investigation Report ($250 fee)
  - ☐ Risk Assessment Report ($250 fee)
  - ☐ Cleanup Plan ($250 fee)
  - ☐ Final Report ($500 fee)
- ☒ Statewide Health Standard
  Final Report ($250 fee)
- ☐ Special Industrial Area
  - ☐ Work Plan (no fee)
  - ☐ Baseline Environmental Report (no fee)

Ensure your check covers all required fees and is made payable to the **Commonwealth of Pennsylvania**.

Section 3 - Municipal/Public Notice Confirmation

There are two stages in the Land Recycling Program where municipal and public notices are required. Read the information associated with each stage. You will be asked to confirm that information establishing your compliance with these notification requirements has been included with this submission.

☐ Check here if you are planning to meet the Background or Statewide Health Standard and your Final Report has been submitted within 90 days of the release.

Indicate date of release here June 3, 2008

No further completion of this section is required if your Final Report for these two standards conforms to the 90 day time frame.

Stage 1 - Notice of Intent to Remediate (NIR)

☐ Check here to confirm you have included proof that a copy of your NIR was provided to each municipality where your site is located. Proof will be a copy of your cover letter and a copy of a signed certified mail receipt slip from the municipality.

☐ Check here to confirm a copy of a proof of publication document from a newspaper serving the area of your site has been included with this submission.

☐ Check here to indicate that a Site-Specific Standard or a Special Industrial Area is involved and a municipal request was received for development of a public involvement plan. The plan/report submission shall include municipality and public comments, which were submitted, and your responses to those comments.

Stage 2 - Cleanup Plan/Report Submission

October 29, 2009 Place date here that each municipality was notified of any plan or report submitted under any of the three remediation standards.

The Susquehanna Independent Weekender November 4, 2009 Place the newspaper name and date that your notice of your plan/report submission was published.

Section 4 - Project Contact

On the lines below, place the name, company, and business phone number of the individuals who can be contacted regarding this submission.

Kevin Rogier, Contractor/Remediator	James Pinta, Jr., P.E., Ph D., Consultant
GasSearch Drilling Services Corporation	URS Corporation
304-562-0758	412-503-4602

THIS DOCUMENT IS PRINTED IN TWO COLORS. DO NOT ACCEPT UNLESS BLUE AND BURGUNDY ARE PRESENT.

URS

P.O. Box 201088 Austin, TX 78720-1088
512-419-6000

Bank of America
ACH R/T 061112788

64-1278 / 811 GA

Check #	Date
00084796	10/30/09

Amount
$**250.00

PAY : TWO HUNDRED FIFTY AND 00/100**********

TO : Department of Environmental Protection
400 Market St
Harrisburg PA 17105-8469

URS CORPORATION

VOID AFTER 180 DAYS FROM DATE OF ISSUE

"00084796" :061112788: 3359 162735"

CABOT-EPA 007812

FINAL REPORT

GASSEARCH DRILLING SERVICES CORPORATION
[redacted] #5 WELLSITE
SPRINGVILLE TOWNSHIP, PENNSYLVANIA

Prepared for:

GDS
GasSearch Drilling Services Corporation

GasSearch Drilling Services Corporation
2399 Virginia Avenue
Culloden, WV 25510

Prepared for:

URS

URS Corporation
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

OCTOBER 2009

FINAL REPORT

GASSEARCH DRILLING SERVICES CORPORATION
[redacted] #5 WELLSITE
SPRINGVILLE TOWNSHIP, PENNSYLVANIA

Prepared for:

GDS
GasSearch Drilling Services Corporation

GasSearch Drilling Services Corporation
2399 Virginia Avenue
Culloden, WV 25510

Prepared by:

URS

URS Corporation
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Prepared by:
URS Corporation
Amanda Bayne
Project Geologist

Reviewed and Approved by:
URS Corporation
James Pinta, Jr., Ph.D., PG
Principal Geologist
PG-000701-G

OCTOBER 2009

CABOT-EPA 007814

DIM0206031

DIM0206050

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

FINAL REPORT SUMMARY

Cabot Oil & Gas Corporation (Cabot) operates the leased wellsite designated as [redacted] #5 in Springville Township, Susquehanna County, Pennsylvania (Site) (**Figure 1**). The Site, leased from [redacted] and [redacted] is a portion of a larger tract that consists of approximately 800 acres and is leased by Cabot to explore for and produce natural gas.

On June 3, 2008 at about 6:00 AM, the GasSearch Drilling Services Company (GDS) drilling crew found a fuel line leaking on the drillpad of [redacted] #5 wellsite. At this time, GDS began the containment and cleanup process. Upon inspection, a break in the hose that supplied diesel fuel to the drill rig and booster was noted and a small area of diesel staining was observed in the riprap. It was also noted that diesel was releasing from the pad at about the elevation of the geotextile, down the hillside (and into the ground surface), seeping from the hillside into a drainage ditch along Herb Button Road, flowing into a culvert under the road, and onto a hillside that drained to a flooded area created by a beaver activity (dams).

The rig was immediately shut down and the rig crew began the containment and clean up process. An emergency response team was dispatched to the location. Interim remedial measures were implemented to contain the release and recover free product. Absorbent materials were placed on the impacted area by the crew. About 700 gallons of diesel was recovered within 2 days of the release.

An application of Petrox® & water mixture consisting of activated microbes as bioaugmentation of naturally occurring microbes and nutrients to promote microbial activity and lime were applied on the impacted areas.

Sampling to characterize Site conditions was conducted after completion of these remedial response actions. Initial results indicate that these actions were effective in remediating impacted areas; however, additional remediation was required in the area below the seep from the drillpad. Attainment of the Statewide Health Standard (SHS) residential, used aquifer (R-U) Medium-Specific Concentrations (MSCs) was demonstrated for the drillpad for constituents on the Pennsylvania Short List for Diesel (constituents of potential concern – [COPCs]).

A second application of Petrox® & water mixture consisting of activated microbes as bioaugmentation of naturally occurring microbes and nutrients to promote microbial activity and lime were applied on the impacted areas. The seep area of the drillpad was excavated and potentially impacted soil was visually evaluated and sampled to evaluate for diesel constituents during wellsite recovery and restoration. Soil samples were collected, analyzed, and evaluated for attainment with Act 2 cleanup standards. The results indicated the cleanup attained compliance with the SHS R-U MSCs for all COPCs.

Soil samples in the area that was flooded were collected, analyzed, and evaluated for attainment with Act 2 standards. The results indicated the cleanup attained compliance with the SHS R-U MSCs for all COPCs.

GDS is requesting Relief from Further Liability Protection (ROL) from the Pennsylvania Department of Environmental Protection (PADEP) for GDS, Cabot, the landowners [redacted] and [redacted] and all subsequent owners and operators of the remediated area in accordance with Pennsylvania's Land Recycling Act (Act 2) according to the regulatory requirements of 25 PA Code Chapter 250.

1.0 INTRODUCTION

Cabot Oil & Gas Corporation (Cabot) operates the leased wellsite designated as [redacted] #5 in Springville Township, Susquehanna County, Pennsylvania (Site) (**Figure 1**). The Site, leased from [redacted] and [redacted] is a portion of a larger tract that consists of approximately 800 acres and is leased by Cabot to explore for and produce natural gas.

The [redacted] #5 wellsite (**Figure 2**) was constructed according to an approved "Erosion and Sedimentation Control Plan" dated October 8, 2007. The Site was constructed on a moderately west-sloping hillside covered with brush and woods (**Appendix A – Photograph 1**). The Site is situated immediately east of Herb Button Road, a dirt and gravel road, below which is a flooded area created by beaver activity (dams) in drainage areas that drain to Meshoppen Creek (designated as Cold Water Fishery [CWF]).

On June 3, 2008 at about 6:00 AM, the GasSearch Drilling Services Company (GDS) drilling crew found a fuel line leaking. At this time, GDS began the containment and cleanup process. Upon inspection, a break in the hose that supplied diesel fuel to the drill rig and booster was noted and a small area of diesel staining was observed in the riprap (**Appendix A – Photograph 2**). It was also noted that diesel was releasing from the pad at about the elevation of the geotextile, down the hillside (and into the ground surface), seeping from the hill side into a drainage ditch along Herb Button Road (**Appendix A – Photograph 3**), flowing into a culvert under the road (**Appendix A – Photographs 4, 5,** and **6**), onto a hillside that drained to a flooded area created by a beaver dam (**Appendix A – Photographs 7** and **8**).

GDS immediately implemented interim remedial measures to contain and recover the released diesel. Mr. Denny Harton, GDS, notified the National Response Center (NRC) at 1-800-424-8802 and was given a confirmation number of 873-025. Mr. Harton also notified the Pennsylvania Department of Environmental Protection and spoke to Mr. Eric Rooney. Mr. Rooney was on the release location by the time that Mr. Harton arrived on June 1, 2008. Mr. Rooney also observed the soil sampling that took place on June 19, 2008. The rig was immediately shut down and the rig crew began the containment and clean up process. CGE Environmental Services (CGE) (PO Box 175, Montrose, PA 18801) was called and an emergency response team dispatched to the location. Absorbent materials were placed on

the contaminated area by the rig crew, CGE, Cabot, and utility pipeline employees. Mr. Gene Rickard of the PADEP visited the Site on June 5, 2008 and issued a General Inspection Report (Non-NPDES).

On June 18, 2008 and again on July 18, 2008, GDS applied about 55 gallons of Petrox® & water mixture consisting of activated microbes as bioaugmentation of naturally occurring microbes and nutrients to promote microbial activity on the drill pad wellsite, seep area on the side of the hillside, in the drainage ditch along the road, the underflow dam, and the standing water in the flooded area below the drillpad. About ½ ton of lime was also applied to the areas at both times the Petrox® was applied.

GDS conducted a preliminary Site investigation in the diesel release area to evaluate the nature and extent of impacted soil and groundwater on and beneath the surface at the Site. Subsequent to Site remedial activities, an additional assessment was conducted to document the effectiveness of these activities. The assessments were performed with the objective of seeking liability protection under Pennsylvania Act 2 (PA Code 25, Chapter 250 et seq.). GDS is seeking Relief from Further Liability (ROL) protection under Pennsylvania Act 2 (PA Code 25, Chapter 250 *et seq.*). A Notice of Intent to Remediate (NIR) and Newspaper Publication are included in **Appendix B**.

Analytical results collected during the Site investigation activities and subsequent to Site remediation activities (**Appendix C**) were evaluated relative to Act 2 Statewide Health Standards (SHS) residential, used aquifer (R-U) Medium Specific Concentrations (MSCs).

The remainder of this document describes the data collection methods used during various phases of Site characterization and remediation, describes remedial activities to address the presence of diesel constituents in the soil at the Site, presents the results of findings of Site characterization activities, and demonstrates attainment with the SHS R-U MSCs for diesel constituents at all areas impacted and subsequently remediated at the Site.

1.1 OBJECTIVES

In accordance with 25 PA Code Chapter 250, the objectives of the Remedial Investigation and Final Report are to:

- Provide sufficient physical data through field investigations to determine if a release has occurred and, if so, what constituents of potential concern (COPCs) are involved and the extent of migration, if any, of those COPCs into surface water, groundwater, soil, or sediment;
- Evaluate and define any source(s) of impact;
- Evaluate whether interim remedial actions are necessary to abate an imminent hazard to human health or the environment and describe the remedial actions conducted to minimize impact to the environment;
- Determine, from measurements at the Site, values for input parameters, including hydraulic conductivity, source dimensions, hydraulic gradient, and groundwater table fluctuations necessary for fate and transport analysis;
- Develop a Conceptual Site Model (CSM);
- Provide an evaluation of potential exposure pathways and potentially exposed populations;
- Provide sufficient information to draw conclusions regarding the attainment of the clean up standards selected and, if required, development of warranted remedial options for each medium of concern.

1.2 SCOPE OF WORK PERFORMED

Initial remedial activities were implemented to recover as much diesel product as was feasible. The initial remediation effort recovered the majority of liquid diesel within 2 days of the release.

Petrox® & water mixture along with lime was applied to potentially impacted areas on the drillpad and along the pathway of migration of the diesel in the vicinity of the wellsite.

Soil, sediment and surface water samples were collected to evaluate the effectiveness of remedial activities on the drillpad, seep area on the side of the hillside, in the drainage ditch along the road, the underflow dam, and the standing water in the flooded area below the drillpad.

A second application of Petrox® & water mixture along with lime was applied to potentially impacted areas on the wellsite and along the pathway of migration of the diesel.

The seep area of the drillpad was excavated and potentially impacted soil was visually evaluated and sampled to evaluate for diesel constituents during wellsite recovery and restoration. Soil samples were collected, analyzed, and evaluated for attainment with Act 2 cleanup standards.

Soil samples in the area that was flooded were collected, analyzed, and evaluated for attainment with Act 2 standards. The results indicated the cleanup attained compliance with the SHS R-U MSCs for all COPCs.

Once all documentation was assembled and evaluated, this Final Report was compiled to document Site conditions, demonstrate attainment compliance with SHS R-U MSCs for all COPCs, and request ROL from PADEP for GDS, Cabot, the landowners [redacted] and [redacted] and all subsequent owners and operators of the remediated area in accordance with Pennsylvania's Land Recycling Act (Act 2) in accordance with the regulatory requirements of 25 PA Code Chapter 250.

2.0 SITE DESCRIPTION

2.1 LOCATION

The Site is part of an 800 acre parcel, a wooded/vegetated area located along Herb Button Road in Springville Township, Susquehanna County, Pennsylvania **(Figure 1)**. The parcel is leased by Cabot, from [redacted] and [redacted] for the exploration and production of natural gas. The [redacted] #5 wellsite (**Figure 2**) was constructed according to an approved Erosion and Sedimentation Control Plan dated October 8, 2007. The wellsite was constructed on a moderately west-sloping hillside covered with brush and woods. The wellsite is situated immediately east of Herb Button Road, a dirt and gravel road, below which is an area that is intermittently flooded due to beaver dams in drainage areas that flow to Meshoppen Creek (designated as Cold Water Fishery (CWF)).

The wellsite (**Appendix B – Photograph 1**) was graded to slope gently to the west, covered with a geotextile, which was covered with about 1 foot (') of riprap to provide a working surface to construct the well.

2.2 SITE HISTORY

On June 3, 2008 at around daylight (6:00 AM) the GDS drilling crew found a fuel line leaking. Upon inspection, a break in a hose that supplied diesel fuel to the drill rig and booster was noted and a small area of diesel staining was observed in the riprap (**Appendix B – Photograph 2**). It was also noted that diesel was releasing from the pad at about the elevation of the geotextile, down the hillside (and into the ground surface), seeping from the hill side into a drainage ditch along Herb Button Road (**Appendix B – Photograph 3**), flowing into a culvert under the road (**Appendix B – Photographs 4, 5,** and **6**), and onto a hillside that drained to the flooded area created by a beaver dam (**Appendix B – Photographs 7** and **8**). At this time, the cleanup and containment process began.

GDS immediately implemented interim remedial measures to contain and recover the released diesel. Mr. Denny Harton of GDS notified the National Response Center (NRC) at 1-800-424-8802 and was given a confirmation number of 873-025. Mr. Harton also notified the PADEP and spoke to Mr. Eric M. Rooney. Mr. Rooney was on the release location by the time that Mr. Harton arrived on-site on June 3, 2008. Mr. Rooney also observed the soil

sampling that took place on June 19, 2008. The rig was immediately shut down and the rig crew began the containment and clean up process. CGE Environmental Services (CGE) (PO Box 175, Montrose, PA 18801) was called and an emergency response team dispatched to the location. Absorbent materials were placed on the contaminated area by the rig crew, CGE, Cabot, and utility pipeline employees. Mr. Gene Rickard with the PADEP visited the Site on June 5, 2008 and issued a General Inspection Report (Non-NPDES).

2.3 REMEDIAL ACTIVITIES AND REMEDIAL INVESTIGATION ACTIVITIES

Interim remedial actions and remedial investigation activities have included the following:

- Immediate measures to eliminate the source of the release at the hose;
- Mobilization of about 30 personnel and equipment to respond to the release (GDS rig crew, CGE, Cabot, and utility pipeline employees). GDS maintained contact with Mr. Rooney and Mr. Rickard (PADEP Contacts) throughout the process of release cleanup;
- Flooding of the drill pad at the source of the release to prevent infiltration of diesel into the ground below the pad. GDS estimates about 65,000 gallons of water (over a period of several days) was used to flush the pad area and pathway down to the flooded area;
- Implementation of measures (construction of soil dams) to provide temporary containment of diesel in the flooded area; GDS estimates that the entire release was contained by 8:30 – 9:00 AM on June 3, the morning of the release – about 3 hours after the discovery of the release;
- Deployment of required booms and absorbent pads to recover the diesel from the flooded area, that was covered with about 1 inch layer of diesel;
- Product skimmers and a vac truck were used to recover gross product in the flooded area on June 3, 2008 and from the drill pad area on June 4, 2008;
- Progressive recovery of released diesel from the flooded area moving upgradient to the drill pad, proceeding from the flooded area to the underflow dam, along the drainage ditch, to the seep area on the wellsite hillside, to the drill pad itself;
- Recovery in the vicinity of the release area on the wellsite consisted of excavation of three trenches (**Figure 3**) to collect product flushed from the release area. Trenches

extended to a depth of about 10" – 18" below ground surface (bgs) and were used to absorb diesel as it floated on the perched water used to flood the area;

- About 5,050 pounds of diesel and absorbent material was recovered in the first 2-3 days (**Appendix D**) - assuming a specific gravity of 0.86 and neglecting the weight of the absorbent material, this indicates about 700 gallons of diesel was recovered;
- By the end of the day on June 5, 2008, all visible diesel had been removed from the flooded area and remediation efforts had progressed upgradient toward the drill pad;
- On June 18, 2008 and again on July 18, 2008, GDS applied about 55 gallons of Petrox® & water mixture on the drill pad wellsite, seep area on the side of the hillside, in the drainage ditch along the road, the underflow dam, and the standing water in the flooded area below the drillpad. About ½ ton of lime was also applied to the areas at both times the Petrox® was applied.
- Initial Remedial Investigation sampling (**Figure 2 – Table 1**) was conducted on June 19, 2008 and on June 27, 2008 to evaluate Site conditions, consisting of:
  - Excavation of 5 soil test pits in the immediate vicinity of the release and collection of 6 samples from the test pits;
  - Sampling soil below two seeps on the hillside of the drillpad;
  - Sampling soil in the drainage swale along Herb Button Road;
  - Sampling soil on the hillside below the underflow catch basin east of Herb Button Road;
  - Sampling soil near the interface of the water level in the flooded area; and
  - Sampling surface water in the flooded area and about 4,000 feet downgradient of the impacted area.
- During drillpad reclamation and recovery activities (October 2008), the seep area of the drillpad (**Figures 3** and **4**) was excavated and potentially impacted soil was placed on visqueen (about 10 yds^3 – **Figure 5**):
  - Confirmational soil samples (8 total) were collected on October 9, 2008 and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards (**Figure 5 – Table 2**);
  - Potentially impacted soil was stockpiled, visually evaluated and sampled (4 samples) on October 9, 2008 to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards and evaluated for management options(**Figure 5 – Table 2**):

- On October 9, 2008, four (4) additional confirmational soil samples were collected in the drainage swale along Herb Button Road, and four (4) additional confirmational soil samples were collected from the hillside below the underflow dam and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards (**Figure 5 – Table 2**); and
- On May 12, 2009, nine (9) additional confirmational soil samples were collected in the area that was flooded, visually evaluated, and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards (**Figure 6 – Table 3**).

3.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

3.1 SITE SOILS/SURFICIAL GEOLOGY

The soils underlying the Site belong to the Wellsboro very stony silt loam, 25 to 50 percent slopes (WsF) and the Lordstown and Oquaga very stony silt loams, 30 to 70 percent slopes (LsF) soil series. Wellsboro stony silt loam is mapped as occupying the western portion of the Site adjacent to Herb Button Road while the Lordstown and Oquaga stony silt loams occupy the eastern portion of the Site. Based on published sources, the following soil series descriptions have been mapped at the Site:

WsF – Wellsboro very stony silt loam, 25 to 50 percent slopes. The Wellsboro series consists of very deep moderately well and somewhat poorly drained soils formed in till derived from red sandstone, siltstone, and shale. Slope ranges from 0 to 50 percent. Permeability is moderate in the surface and upper subsoil layers and slow or very slow in the lower subsoil and substratum.

LsF – Lordstown and Oquaga very stony silt loams, 30 to 70 percent slopes. The Lordstown series consists of moderately deep, well drained soils formed till and cryoturbated material derived from siltstone and sandstone on bedrock controlled landforms of glaciated dissected plateaus. They are nearly level to very steep soils on hillsides and hilltops in glaciated bedrock controlled uplands. Slope ranges from 0 to 90 percent. The Oquaga series consists of moderately deep, somewhat excessively drained soils formed in a thin mantle of till over sandstone, siltstone, and shale bedrock on nearly level to very steep uplands. Slope ranges from 0 to 70 percent. Permeability is moderate.

3.2 SURFACE WATER

There is a perennial or intermittent water body adjacent the Site that was impacted by the diesel release; however, immediately east of Herb Button Road, a dirt and gravel road, an area that is intermittently flooded due to beaver activity (dams) in drainage areas that flow to Meshoppen Creek is present. Meshoppen Creek, a tributary of the Susquehanna River, is located approximately 500 feet east of the Site. The Meshoppen Creek flows south toward Susquehanna River.

3.3 REGIONAL GEOLOGY

The Site is located at approximately 1,060 ft amsl (above mean sea level) in the **Glaciated Low Plateau Section of the Appalachian Plateaus Province** physiographic province. The Glaciated Low Plateau Section includes an area of diversified topography in northeastern Pennsylvania. The topography consists of rounded hills and broad to narrow valleys all of which have been modified by glacial erosion and deposition. Swamps and peat bogs are common in the area. The area reflects the interplay between bedrock of various types, mainly sandstones and siltstones, and glacial erosion and deposition. The more erosion-resistant rocks form the hills, while the less erosion-resistant rocks occur in the valleys. Glacial deposits, mainly glacial till or sand and gravel, may occur anywhere, but are found mainly in the valley bottoms and margins (DCNR).

3.4 REGIONAL HYDROGEOLOGY

The local hydrogeology at the Site is typical of the regional hydrogeology of the Low Glaciated Section of the Appalachian Plateau Physiographic Province. The uppermost aquifer is typically unconfined and within unconsolidated glacial till. The till in this area is typically more discontinuous than in the northwestern portion of the state. Some of these soils have a fragipan at shallow depth and therefore are somewhat poorly to poorly drained. The surface texture of these soils is predominantly silt loam. The landscape is undulating and the erosion potential is low to moderate. Rock fragments are common in the soils of this area. Some of the soils have very low root zone available water-holding capacity due to their limited rooting depth. The growing season is short due to the elevation and northern latitude.

4.0 SELECTION OF CONSTITUENTS OF POTENTIAL CONCERN AND SELECTION OF REMEDIATION STANDARDS

Based on the observed release of diesel fuel and the results of the remedial investigation, COPCs at the Site are associated with diesel fuel and are characterized by the Pennsylvania Short List for Diesel Fuel (TGM, 2002). Site media were evaluated for the following analytes:

Surface Water:

benzene, cumene, ethylbenzene, methyl tert-butyl ether (MTBE), naphthalene, toluene, 1,2,4-trimethylbenzene (TMB), and 1,3,5-TMB.

Soil:

benzene, cumene, ethylbenzene, methyl tert-butyl ether (MTBE), naphthalene, toluene, 1,2,4-TMB, and 1,3,5-TMB.

The following analytes were detected at the Site:

Surface Water:

No analytes were detected above reporting limits.

Soil:

Analytes detected include: benzene, cumene, ethylbenzene, naphthalene, toluene, 1,2,4-TMB and 1,3,5-TMB. The only analyte from the Pennsylvania Short List for Diesel parameters not detected at the Site is MTBE.

The selected remediation standard for demonstration of attainment to receive ROL is the SHS R-U MSCs, as specified in 25 PA Code Chapter 250.

Table 1 summarizes the results for the initial sampling for the remedial investigation after the diesel release, and initial recovery of product and initial application of Petrox® and lime. **Table 2** summarizes the results for the second round of sampling after the second application of Petrox® and lime. **Table 3** summarizes the results for the basin samples collected during the dry season.

5.0 REMEDIAL INVESTIGATION, SITE REMEDIATION AND CONFIRMATIONAL SAMPLING

URS Corporation (URS) mobilized to the Site on June 18, 2008 and was on-site on June 19, 2008. Dr. James Pinta, Jr. and Mr. Rick Chapman conducted the initial Site inspection and sampling activities. A subsequent Site visit and surface water sampling Site visit was conducted by Mr. Alan Hermely and Mr. Chris Cole of URS on June 27, 2008.

The purpose of the sampling was to evaluate Site conditions (soil and surface water) in the vicinity of the release and pathway of migration for potential impacts by COPCs after initial product recovery and after initial application of Petrox® and lime. While on-site, efforts were made to evaluate the pathways of migration for impacts and to delineate the potential impacts to environmental media, including soils, sediments, and surface water.

Ten soil and sediment samples were collected using Terracore (MeOH/SBS) kits supplied by Pace Analytical Services, Inc. (Pace) in Greensburg, PA, a NELAC accredited laboratory. Three surface water samples were collected using preserved 40-ml vials supplied by Pace. All samples were analyzed for the Pennsylvania Short List for diesel products as updated in March 18, 2008. Analytical results are summarized in **Table 1**, sampled locations are indicated on **Figure 2**, and analytical reports are provided in **Appendix C**.

Initial Remedial Investigation samples were collected as follows:

- Sample #1 – Area of the release, 0 – 2' bgs (Test Pit #1, 37' north of [redacted]5 wellhead);
- Sample #2 – Area of the release, 4' – 5' bgs (Test Pit #1, 37' north of [redacted]5 wellhead);
- Sample #3 - Downgradient of the release about 35' west of Test Pit#1, 0 – 2' bgs;
- Sample #4 – North of Test Pit#1 (18' north of Test Pit#1), 0 – 2' bgs;
- Sample #5 – Seep area immediately at level of Drill Pad (geotextile) on hillside sloping down to Herb Button Road (surface sample);
- Sample #6 – Test Pit#4 (10 ' south of release area), 0 – 2' bgs;
- Sample #7 – Test Pit#5 (10' east of Test Pit#1), 0 – 2' bgs;

- Sample #8 – Active seep (sheen observed) near the drainage along Herb Button Road (surface);
- Sample #9 – sediment in drainage (about 5' below the level of the road, about 15' from the road) below the underflow dam containing water from culvert underneath Herb Button Road;
- Sample #10 – Sediment at the interface between surface water and the shoreline in the flooded area southwest of the release area.
- Surface water sample #1 (Cabot-01) – collected from near the west shore of the flooded area about 20 feet south of the release pathway entering the flooded area;
- Surface water sample #2 (Cabot-02) – collected from near the west shore of the flooded area about 100 feet south of the release pathway entering the flooded area;
- Surface water sample #3 (Cabot-03) – Collected from Meshoppen Creek about 4,000 feet downgradient of the release pathway entering the flooded area.

Test pits in the drillpad area indicated the upper 1 ft. of the pad was covered with riprap underlain by a geotextile fabric (**Appendix A** and **Photographs 24, 25,** and **26**). At the time of the sampling activities, sediments above the geotextile were saturated to moist, while sediments below the geotextile were damp to moist. Surface samples along the pathway of migration of the diesel release and at seeps were typically collected from the upper portion of the area sampled, typically no deeper than 0-6" bgs.

The results (**Table 1**) indicated that remedial efforts were successful in minimizing impacts of COPCs to the Site. Minor exceedences of the SHS R-U MSCs for 1,2,4-TMB and 1,3,5-TMB in samples in the drainage swale along Herb Button Road, samples on the hillside below the underflow catch basin, and in the basin of the flooded area indicated the need for additional remediation.

A second application of Petrox® and lime was applied on July 18, 2008. A follow-up sampling visit was coordinated with drillpad reclamation and recovery activities being conducted by GDS. During drillpad reclamation and recovery activities (October 2008), the seep area of the drillpad (**Figures 4** and **5**) was excavated and potentially impacted soil was placed on visqueen (about 10 yds^3 – **Figure 5**). Confirmational soil samples (8 total – Soil Sample in Excavator #1 through Soil Sample in Excavator #8) were collected on October 9,

2008 and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards for Site COPCs (**Figure 5 – Table 2**). Potentially impacted soil was stockpiled and visually evaluated and sampled (4 samples – Soil Sample #1 through Soil Sample #4) on October 9, 2008 to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards for Site COPCs (**Figure 5 – Table 2**), and evaluated for management options. In addition, four (4) additional confirmational soil samples (Road Drainage #1 through Road Drainage #4) were collected in the drainage swale along Herb Button Road, and four (4) additional confirmational soil samples (Underflow Dam #1 through Underflow Dam #4) were collected from the hillside below the underflow dam and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards (**Figure 5 – Table 2**).

The results (**Table 2**) indicated all samples were in attainment of their respective SHS R-U MSCs for all COPCs.

On May 12, 2009, nine (9) additional confirmational soil samples (TB-1 through TB-9) were collected in the area that was flooded, visually evaluated, and analyzed to evaluate the effectiveness of remedial efforts and attainment with Act 2 cleanup standards (**Figure 6 – Table 3**). Soils consisted of silty brown-black (organic rich) clay. No samples were visually stained; however two samples (TB-8 and TB-9) had readings >0 on the photo-ionization detector (PID). However, the analytical results (**Table 3**) indicated all samples were in attainment of their respective SHS R-U MSCs for all COPCs.

Groundwater beneath the Site is not a medium of concern because the diesel migration occurred by gravity flow downhill coupled with immediate remedial response, providing no opportunity for diesel to infiltrate groundwater.

6.0 FATE AND TRANSPORT ANALYSIS

The diesel release initially flowed onto the constructed drillpad where impacts were limited to the surficial materials above the geotextile. Diesel migrated along the geotextile to the edge of the constructed drillpad, flowed down the hillside of the constructed drillpad and onto the ground surface into a drainage ditch along Herb Button Road, flowed into a culvert under the road, and onto a hillside that drained to a flooded area created by beaver activity (dams). Initial response to the diesel release was immediate and impacted areas were predominantly constructed surfaces (drillpad, road drainage swale, etc.), therefore, diesel product had little opportunity to infiltrate these materials. Similarly, the flooded area below Herb Button Road did not encounter prolonged contact of diesel product with sediments in this area. In addition, rapid response contained the diesel impacts to a limited area in the flooded area.

For these reasons, diesel product migration was limited to gravity flow over the surface of the impacted area, with minimal infiltration (less than 3 inches below ground surface in these areas). Flushing the product from the elevated drillpad to the flooded area (where the product was recovered) and subsequent application of Petrox® and lime contributed to the effective remediation of the Site.

URS has determined that no impacts to Meshoppen Creek occurred based on surface water samples taken at the Site. All areas impacted by the diesel release have been remediated to achieve attainment with the SHS R-U MSCs for all Site COPCs.

7.0 SITE CONCEPTUAL MODEL

Based upon the data acquired during the Remedial Investigation activities, Site surface soils were found to be minimally impacted in areas where the diesel release occurred. The nature and extent of the release was evaluated using the pathways of migration observed by Site personnel at the time of the release. Rapid response did not allow penetration of diesel product to depths greater than about 6 inches bgs in the areas impacted by the release.

Based on soil sampling results, soil impact has been delineated both vertically and horizontally at the Site. Groundwater was not expected to be impacted. The release of the diesel from the fuel line associated with drilling operations, and subsequent flow of diesel product downhill to the flooded area impacted a relatively narrow pathway of migration that was limited to the surface and near-surface soils (0 – 6' bgs) and standing water present in the flooded area below Herb Button Road.

Three rounds of soil samples and two rounds of surface water samples were collected throughout the Remedial Investigation and subsequent remediation activities (**Figures 2, 4, 5,** and **6** and **Tables 1, 2,** and **3**).

Remedial activities remediated Site media (soil and surface water) so that attainment with the SHS R-U MSCs for all Site-related COPCs has been demonstrated (**Section 10.0**)

8.0 ECOLOGICAL SCREENING ASSESSMENT

In accordance with 25 PA Code §250.311 and the PADEP TGM (2002), an evaluation of potential impact to ecological receptors from Site conditions was completed utilizing the Ecological Screening Process. No additional evaluation was conducted since the following criteria were met at the Site:

- The only constituents detected on-site are residual constituents of light petroleum (diesel constituents) products (25 PA Code §250.311(b)(1); and
- The area of soil having residual impacts is less than 2 acres and the area of sediments having residual impacts is less than 1,000 square feet. (25 PA Code §250.311(b)(2).

Therefore, no additional evaluation is required.

9.0 SELECTION OF REMEDIATION STANDARDS

Based on the findings of the Site characterization as described above, GDS has elected to seek ROL by demonstrating attainment of the SHS R-U MSCs for all COPCs. Soil, sediments, and surface water were the only media impacted by the diesel release. Remediation of surface water, soil and sediments was conducted to meet the SHS, R-U MSCs for Pennsylvania Short List of diesel constituents, including benzene, ethylbenzene, toluene, isopropylbenzene (cumene), methyl tert-butyl benzene (MTBE), 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene.

Surface water was remediated to meet SHS R-U MSCs and Ambient Water Quality Criteria (25 PACode Chapter 16) as indicated in **Table 1**.

Soils and sediments were remediated to meet SHS R-U MSCs as indicated in **Tables 1, 2,** and **3**.

10.0 ATTAINMENT DEMONSTRATION

This section presents the attainment demonstration of the SHS R-U MSCs for all COPCs in potentially impacted media.

10.1 SOIL

Based on soil sampling results, soil impacts have been delineated both vertically and horizontally at the Site. In accordance with 25 PA Code §250.703, for statistical methods under §250.707(b)(1)(i), 75% of all samples are equal to or less than the SHS R-U MSCs or the limit related to practical quantitation limits (PQLs) with no individual sample exceeding 10x the SHS R-U MSC on the property for all COPCS (**Tables 1, 2,** and **Table 3**).

10.2 GROUNDWATER

Due to the rapid response of GDS in remediating the diesel release, short time-frame of exposure to diesel constituents, low conductivity of surface soils and sediments, and observed depth of penetration of diesel constituents, groundwater is not considered to be a medium of concern.

10.3 SURFACE WATER

Due to the rapid response of GDS in remediating the diesel release and short time-frame of exposure to diesel constituents, surface water has been shown not to have residual impacts and meets applicable water quality criteria (**Table 1**).

10.4 VAPOR INTRUSION

The potential effect of volatilization to indoor air quality (IAQ) was assessed using *Pennsylvania's Vapor Intrusion Into Buildings From Groundwater and Soil under Pennsylvania (PA) Act 2 SWHS Guidance* (January 24, 2004). This guidance document provides a screening methodology for evaluating the potential health effects resulting from vapor intrusion of Chemicals of Potential Indoor Air Concern (COPIACs) using the Johnson and Ettinger (JE) Vapor Intrusion Model using PA-specific parameters (JE-PA Guidance).

The JE-PA Guidance for vapor intrusion from soil indicates that there is no potentially complete exposure pathway due to the fact that there are no inhabitable structures within 100 feet of the area that may contain residual impacts at low levels. In addition, the presence of the producing gas well and associated equipment make the likelihood of inhabited structures in this area unlikely for the foreseeable future.

10.5 POST REMEDIATION CARE PLAN

No Post Remediation Care is required to attain and maintain attainment with the demonstration of attainment with the SHS R-U MSCs.

11.0 ENVIRONMENTAL COVENANT

An Environmental Covenant is not required for this Site.

12.0 CONCLUSIONS

Cabot Oil & Gas Corporation (Cabot) operates the leased wellsite designated as [redacted] #5 in Springville Township, Susquehanna County, Pennsylvania. The Site, leased from [redacted] and [redacted] is a portion of a larger tract that consists of approximately 800 acres and is leased by Cabot to explore for and produce natural gas.

On June 3, 2008 at about 6:00 AM, the GasSearch Drilling Services Company's (GDS) drilling crew found a fuel line leaking on the drillpad of [redacted] #5 wellsite. At this time, GDS began the containment and cleanup process. Upon inspection, a break in the hose that supplied diesel fuel to the drill rig and booster was noted and a small area of diesel staining was observed in the riprap. It was also noted that diesel was releasing from the pad at about the elevation of the geotextile, down the hillside (and into the ground surface), seeping from the hillside into a drainage ditch along Herb Button Road, flowing into a culvert under the road, and onto a hillside that drained to a flooded area created by a beaver activity (dams).

The rig was immediately shut down and the rig crew began the containment and clean up process. An emergency response team was dispatched to the location. Interim remedial measures were implemented to contain the release and recover free product. Absorbent materials were placed on the impacted area by the crew. About 700 gallons of diesel was recovered within 2 days of the release.

An application of Petrox® & water mixture consisting of activated microbes as bioaugmentation of naturally occurring microbes and nutrients to promote microbial activity and lime were applied on the impacted areas.

Sampling to characterize Site conditions was conducted after completion of these remedial response actions. Initial results indicate that these actions were effective in remediating impacted areas; however, additional remediation was required in the area below the seep from the drillpad. Attainment of the SHS R-U MSCs was demonstrated for the drillpad for Site COPCs.

A second application of Petrox® & water mixture consisting of activated microbes as bioaugmentation of naturally occurring microbes and nutrients to promote microbial activity

and lime were applied on the impacted areas. The seep area of the drillpad was excavated and potentially impacted soil was visually evaluated and sampled to evaluate for diesel constituents during wellsite recovery and restoration. Soil samples were collected, analyzed, and evaluated for attainment with Act 2 cleanup standards. The results indicated the cleanup attained compliance with the SHS R-U MSCs for all COPCs.

Soil samples in the area that was flooded were collected, analyzed, and evaluated for attainment with Act 2 standards. The results indicted the cleanup attained compliance with the SHS R-U MSCs for all COPCs.

GDS is requesting Relief from Further Liability Protection from the PADEP for GDS, Cabot, the landowners [redacted] and [redacted] [redacted] and all subsequent owners and operators of the remediated area in accordance with Pennsylvania's Land Recycling Act (Act 2) in accordance with the regulatory requirements of 25 PA Code Chapter 250.

13.0 REFERENCES

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TABLES

Table 1

Analytical Results for
Soil and Water Samples
Diesel Spill Cleanup
PA Diesel Short List - 8260
June 19, 2008 and June 27, 2008

[redacted] #5 Wellsite
Susquehanna County
Springville Township, PA

		Soil Samples (results in mg/kg)							
Sample ID	***PID Reading (PPM)***	**Benzene**	**Isopropylbenzene (Cumene)**	**Ethylbenzene**	**Methyl tert-Butyl Ether**	**Naphthalene**	**Toluene**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**
Soil MSCs[2] (mg/kg)		***0.5***	***780***	***70***	***2***	***25***	***100***	***9***	***2.8***
#1	0.0	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
#2	0.0	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
#3	0.0	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055	ND<0.0055
#4	0.0	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
#5	0.0	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058
#6	0.0	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
#7	0.0	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056
#8	2.6	ND<0.470	ND<0.470	0.90	ND<0.470	2.80	0.58	8.50	**2.90**
#9	2.1	ND<0.300	0.32	0.50	ND<0.300	3.80	ND<0.300	**9.50**	**2.90**
#10	3.3	ND<0.330	0.50	0.86	ND<0.330	4.00	ND<0.330	**13.00**	**4.50**
		Surface Water Samples (results in µg/L)							
Surface Water WQCs[3] (µg/L)		***1.2***	***1,100***	***580***	***20***	***43***	***330***	***16***	***16***
Cabot-01	---	ND<1.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
Cabot-02	---	ND<1.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
Cabot-03	---	ND<1.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
Trip Blank	---	ND<1.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0

Notes:
1 = ND<0.050 - Parameter was not detected above the reporting limit specified

2 = Medium Specific Concentrations (MSCs) were established from the Residential, Used Aquifer with TDS <2,500 MSCs Soil to Groundwater Numeric Values listed in Appendix A, Tables 1 and 3 of 25 PA Code Section 250, Administration of the Land Recycling Act (Act 2) regulations.

3 = Water Quality Criteria (WQCs) were established from the 25 PA Code Chapter 16 and 25 PA Code Chapter 250 regulations.

MSC and WQC exceedances are shown in yellow highlighted cells with bold type. **12.5**

CABOT-EPA 007844

DIM0206031

DIM0206080

Table 2

Analytical Results for
Soil Samples
Diesel Spill Cleanup
PA Diesel Short List - 8260
October 9, 2008

[redacted]5 Wellsite
Susquehanna County
Springville Township, PA

		Soil Samples (results in mg/kg)							
Sample ID	***PID Reading (PPM)***	**Benzene**	**Isopropylbenzene (Cumene)**	**Ethylbenzene**	**Methyl tert-Butyl Ether**	**Naphthalene**	**Toluene**	**1,2,4-Trimethylbenzene**	**1,3,5-Trimethylbenzene**
Soil MSCs[2] (mg/kg)		***0.5***	***780***	***70***	***2***	***25***	***100***	***9***	***2.8***
Excavator #1		ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056
Excavator #2		ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058
Excavator #3		ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
Excavator #4		ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
Excavator #5		ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053	ND<0.0053
Excavator #6		ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056
Excavator #7		ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
Excavator #8		ND<0.0054	ND<0.0054	ND<0.0054	ND<0.0054	ND<0.0054	ND<0.0054	ND<0.0054	ND<0.0054
Sample #1		ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057	ND<0.0057
Sample #2		ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056
Sample #3		ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058	ND<0.0058
Sample #4		ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056	ND<0.0056
Underflow Dam #1		ND<0.0093	ND<0.0093	ND<0.0093	ND<0.0093	ND<0.0093	ND<0.0093	ND<0.0093	ND<0.0093
Underflow Dam #2		ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082	ND<0.0082
Underflow Dam #3		ND<0.0077	ND<0.0077	ND<0.0077	ND<0.0077	ND<0.0077	ND<0.0077	ND<0.0077	ND<0.0077
Underflow Dam #4		ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073
Road Drainage #1		0.021	0.019	0.120	ND<0.0083	0.160	0.380	0.440	0.370
Road Drainage #2		ND<0.0084	ND<0.0084	ND<0.0084	ND<0.0084	ND<0.0084	ND<0.0084	ND<0.0084	ND<0.0084
Road Drainage #3		ND<0.0071	ND<0.0070	0.068	ND<0.0071	0.130	ND<0.0070	0.300	0.090
Road Drainage #4		ND<0.0064	ND<0.0064	0.02	ND<0.0064	0.047	ND<0.0065	0.120	0.035

Notes:
1 = ND<0.050 - Parameter was not detected above the reporting limit specified

2 = Medium Specific Concentrations (MSCs) were established from the Residential, Used Aquifer with TDS <2,500 MSCs Soil to Groundwater Numeric Values listed in Appendix A, Tables 1 and 3 of 25 PA Code Section 250, Administration of the Land Recycling Act (Act 2) regulations.

MSC exceedances are shown in yellow highlighted cells with bold type.

Table 3

Analytical Results for
Soil Samples
Diesel Spill Cleanup
PA Diesel Short List - 8260
May 19, 2009

[redacted]#5 Wellsite
Susquehanna County
Springville Township, PA

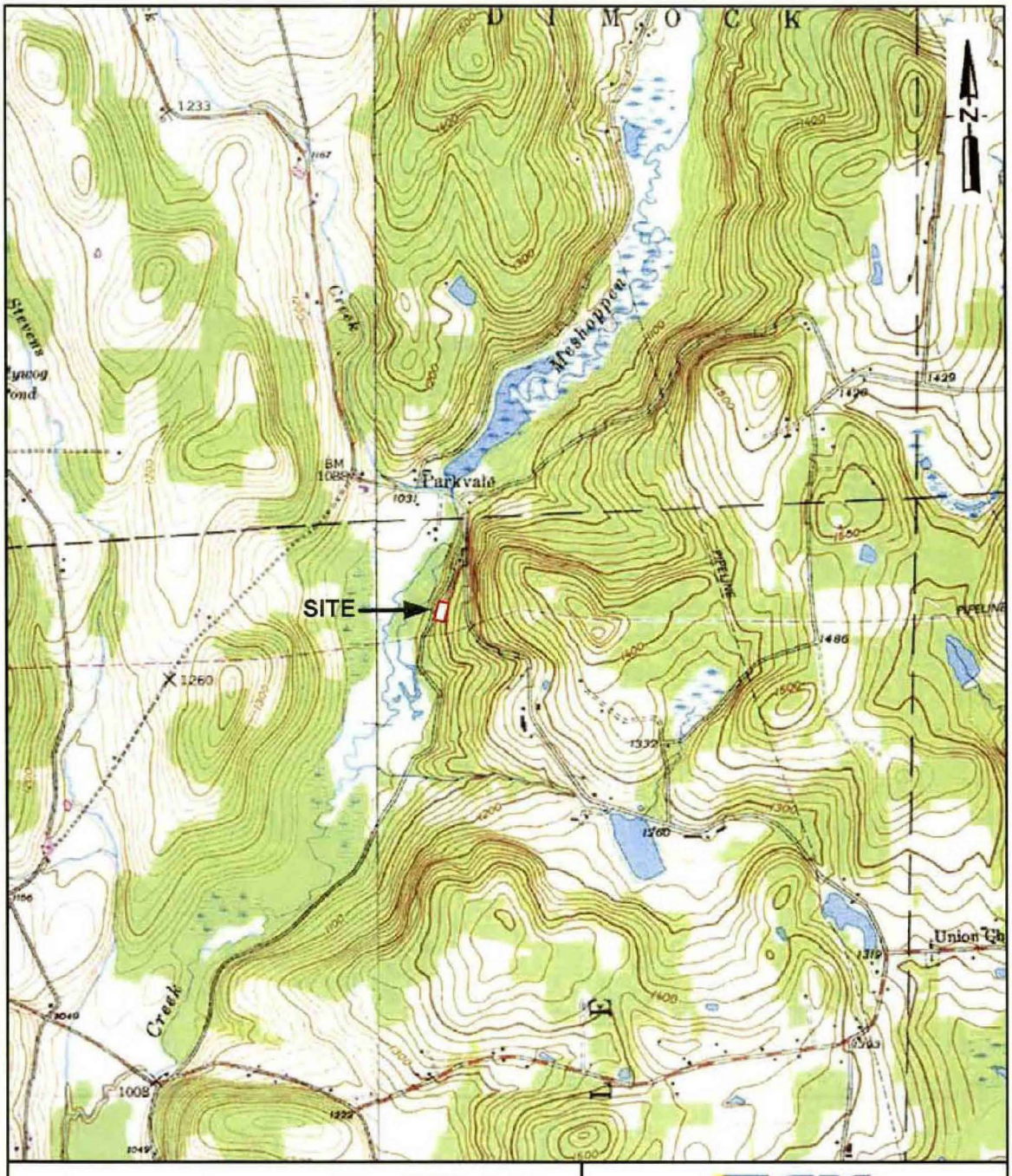
		Soil Samples (results in mg/kg)							
Sample ID	*PID Reading (PPM)*	Benzene	Isopropylbenzene (Cumene)	Ethylbenzene	Methyl tert-Butyl Ether	Naphthalene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene
Soil MSCs[2] (mg/kg)		*0.5*	*780*	*70*	*2*	*25*	*100*	*9*	*2.8*
TB-1	0.0	ND<0.007	ND<0.007	ND<0.007	ND<0.007	0.0158	0.0137	0.0413	0.0209
TB-2	0.0	ND<0.0056	0.0197	0.0731	ND<0.0056	0.0397	ND<0.0056	0.2440	0.0822
TB-3	0.0	ND<0.007	0.0097	0.0211	ND<0.007	0.0226	ND<0.007	0.1330	0.0521
TB-4	0.0	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	ND<0.0073	0.0140	ND<0.0073
TB-5	0.0	ND<0.0083	ND<0.0083	ND<0.0083	ND<0.0083	0.013	ND<0.0083	0.0085	ND<0.0083
TB-6	0.0	ND<0.0071	ND<0.0071	ND<0.0071	ND<0.0071	ND<0.0071	ND<0.0071	ND<0.0071	ND<0.0071
TB-7	0.0	ND<0.0063	ND<0.0063	ND<0.0063	ND<0.0063	ND<0.0063	ND<0.0063	ND<0.0063	ND<0.0063
TB-8	2.6	ND<0.0056	0.011	0.016	ND<0.0056	0.048	ND<0.0056	0.1800	0.0687
TB-9	2.1	ND<0.0067	ND<0.0067	0.0154	ND<0.0067	0.0073	ND<0.0067	0.0313	0.0112

Notes:
1 = ND<0.050 - Parameter was not detected above the reporting limit specified

2 = Medium Specific Concentrations (MSCs) were established from the Residential, Used Aquifer with TDS <2,500 MSCs Soil to Groundwater Numeric Values listed in Appendix A, Tables 1 and 3 of 25 PA Code Section 250, Administration of the Land Recycling Act (Act 2) regulations.

MSC and WQC exceedances are shown in yellow highlighted cells with bold type. **12.5**

FIGURES



BASE MAP SOURCE: USGS 7.5 minute series topographic quadrangle map Springville, Pennsylvania (1946, photorevised 1969) and Hop Bottom, Pennsylvania (1994).

GDS
GasSearch Drilling Services Corporation

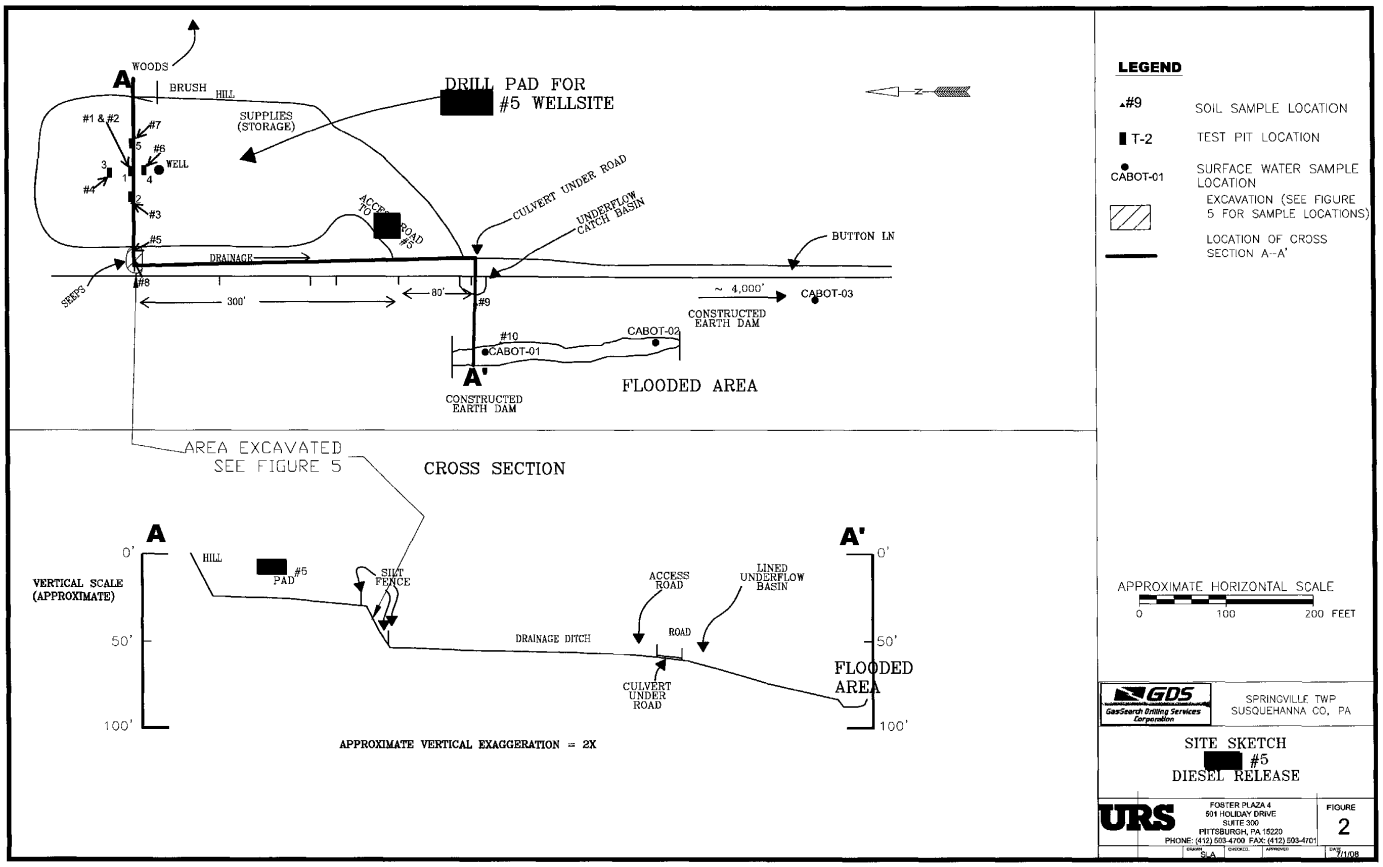
FIGURE 1
SITE VICINITY MAP
[redacted] #5
SUSQUEHANNA COUNTY PENNSYLVANIA

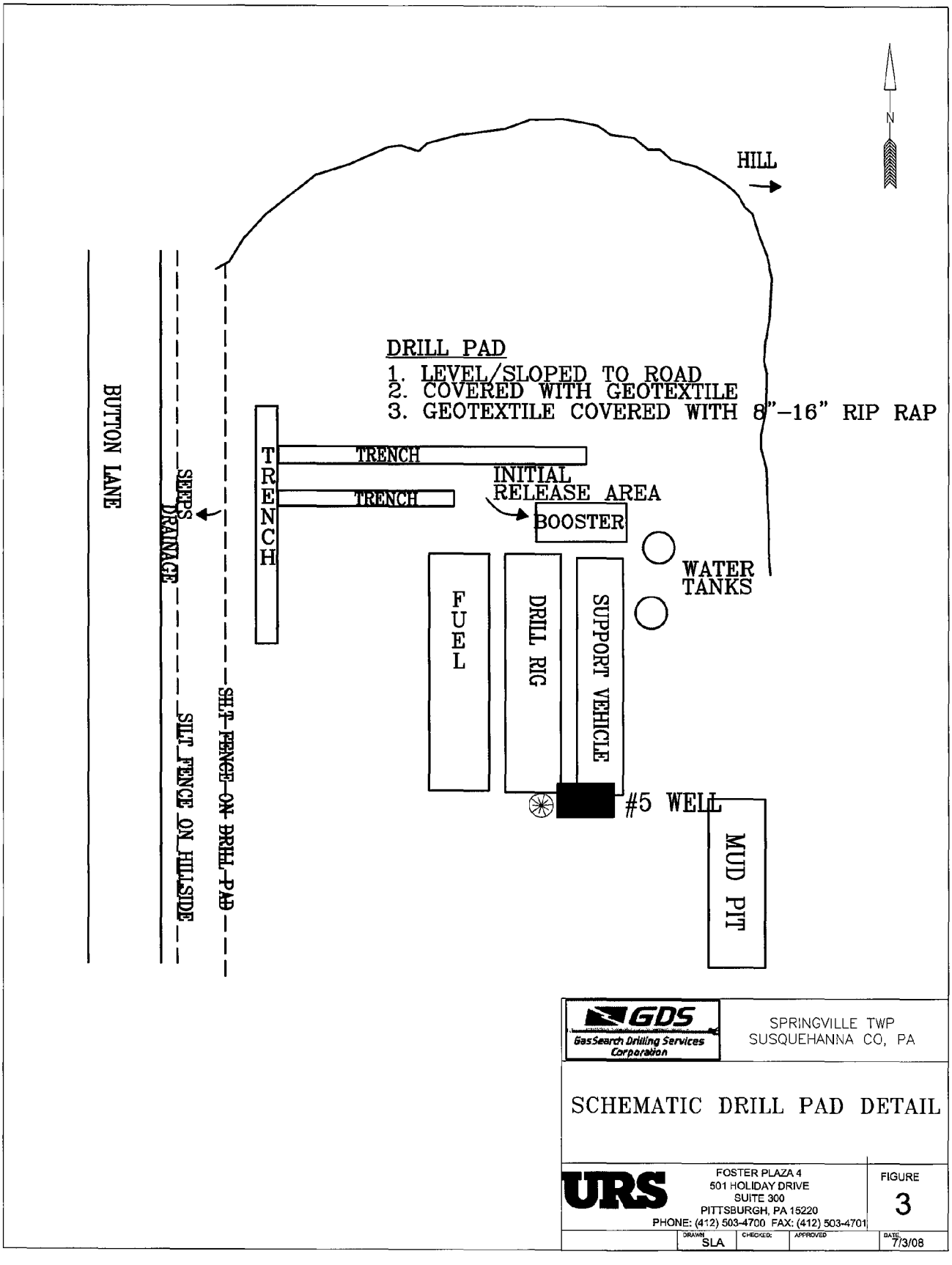
URS

CABOT-EPA 007848

DIM0206031

DIM0206084

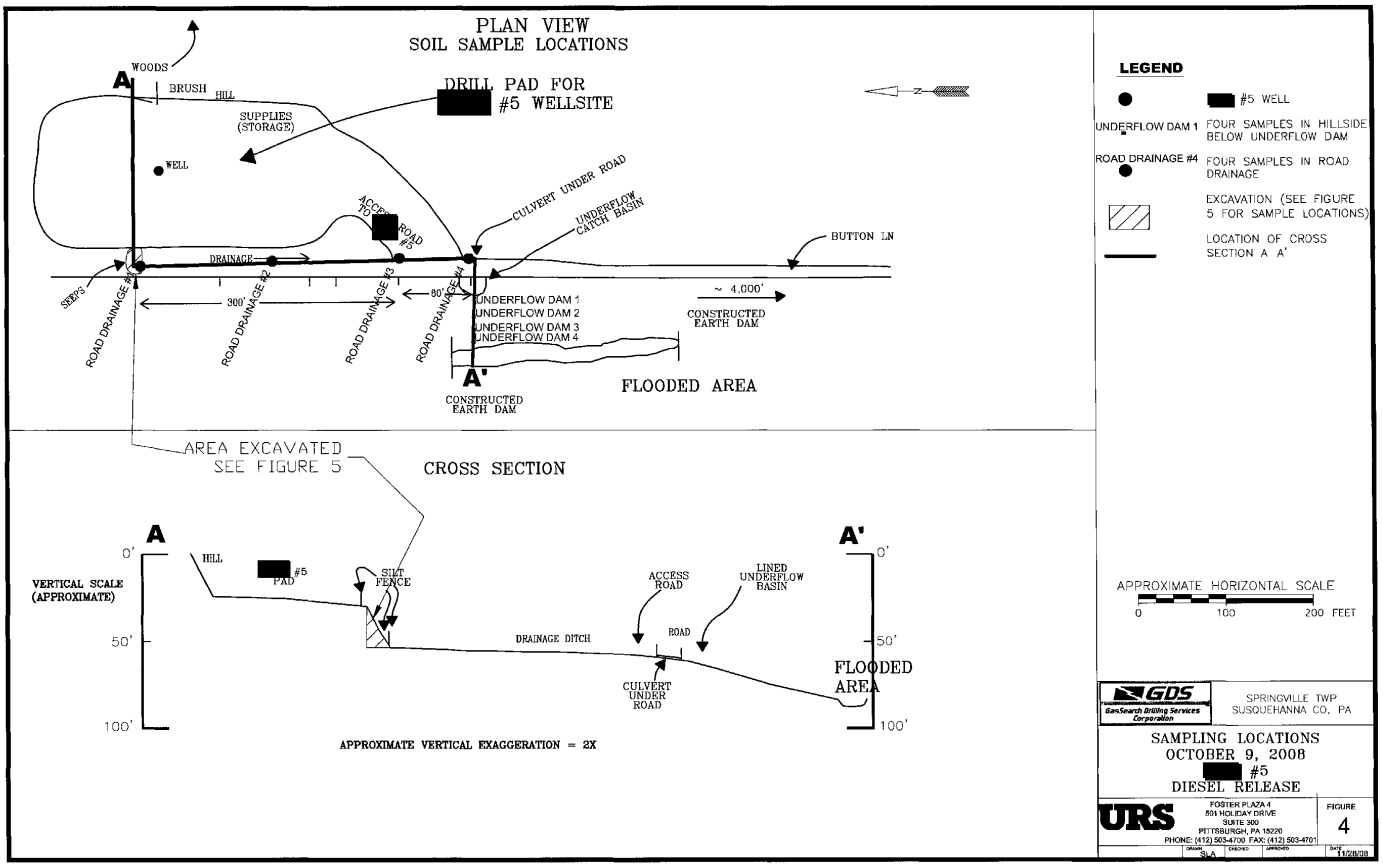


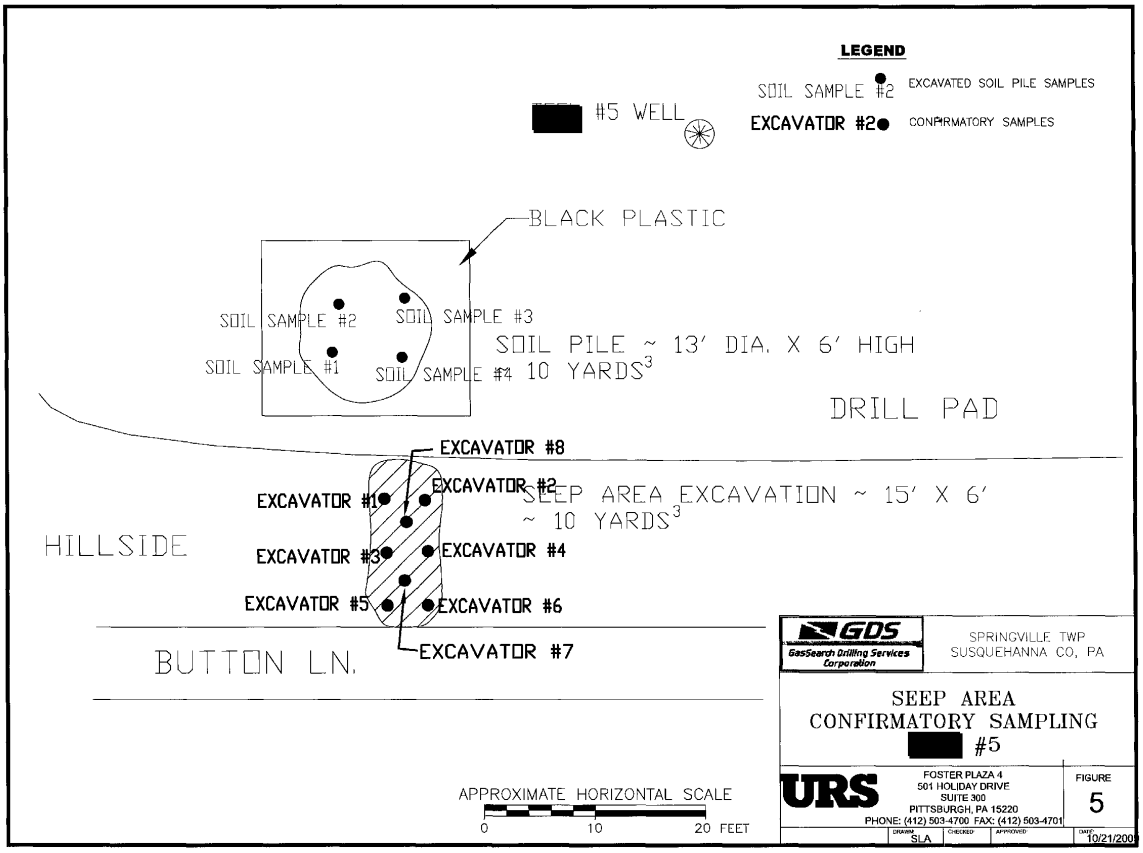


CABOT-EPA 007850

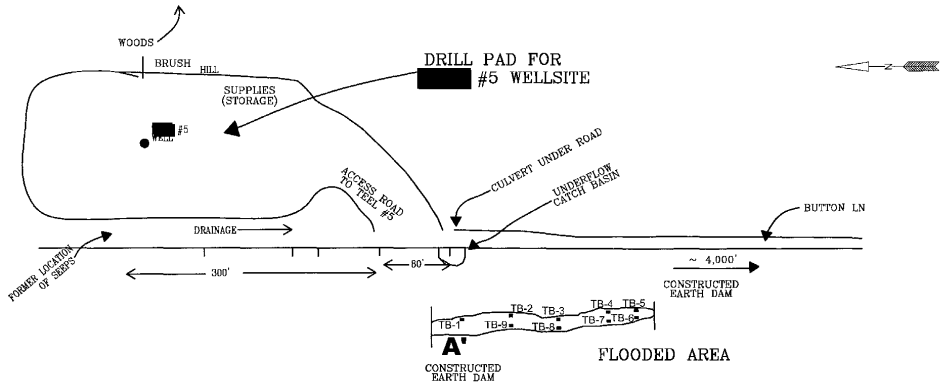
DIM0206031

DIM0206086





PLAN VIEW
BASIN SAMPLE LOCATIONS



LEGEND

● [redacted] #5 WELL

BASIN 9 SAMPLES IN BASIN (TB-1 THROUGH TB-9)

APPROXIMATE HORIZONTAL SCALE
0 100 200 FEET

GDS GasSearch Drilling Services Corporation

SPRINGVILLE TWP
SUSQUEHANNA CO, PA

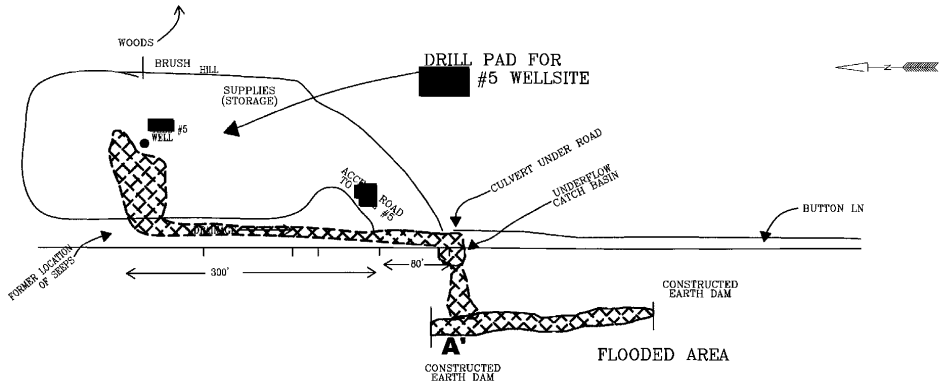
SAMPLING LOCATIONS
MAY 12, 2009
[redacted] #5
DIESEL RELEASE

URS
FOSTER PLAZA 4
601 HOLIDAY DRIVE
SUITE 300
PITTSBURGH, PA 15220
PHONE: (412) 503-4700 FAX: (412) 503-4701

FIGURE 6

DRAWN SLA | CHECKED | APPROVED | DATE 10/5/2009

PLAN VIEW
[redacted] #5 WELL SITE
DIESEL RELEASE AREA IMPACTED AND REMEDIATED
SITE FOR WHICH RELIEF FROM FURTHER LIABILITY
PROTECTION IS REQUESTED



LEGEND

● [redacted] #5 WELL

AREA IMPACTED BY DIESEL RELEASE REMEDIATED – SITE FOR WHICH RELIEF FROM FURTHER LIABILITY PROTECTION IS REQUESTED.

APPROXIMATE HORIZONTAL SCALE
0 100 200 FEET

GDS GasSearch Drilling Services Corporation

SPRINGVILLE TWP
SUSQUEHANNA CO, PA

AREA REMEDIATED
[redacted] #5 DIESEL RELEASE

URS
FOSTER PLAZA 4
501 HOLIDAY DRIVE
SUITE 300
PITTSBURGH, PA 15220
PHONE: (412) 503-4700 FAX: (412) 503-4701

FIGURE 7

DRAWN: SLA | CHECKED | APPROVED | DATE: 10/5/2009

APPENDIX A

SITE PHOTOGRAPHS

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
1	6/05/08

Direction Photo Taken:

Northeast

Description:

[redacted] #5 Wellsite.

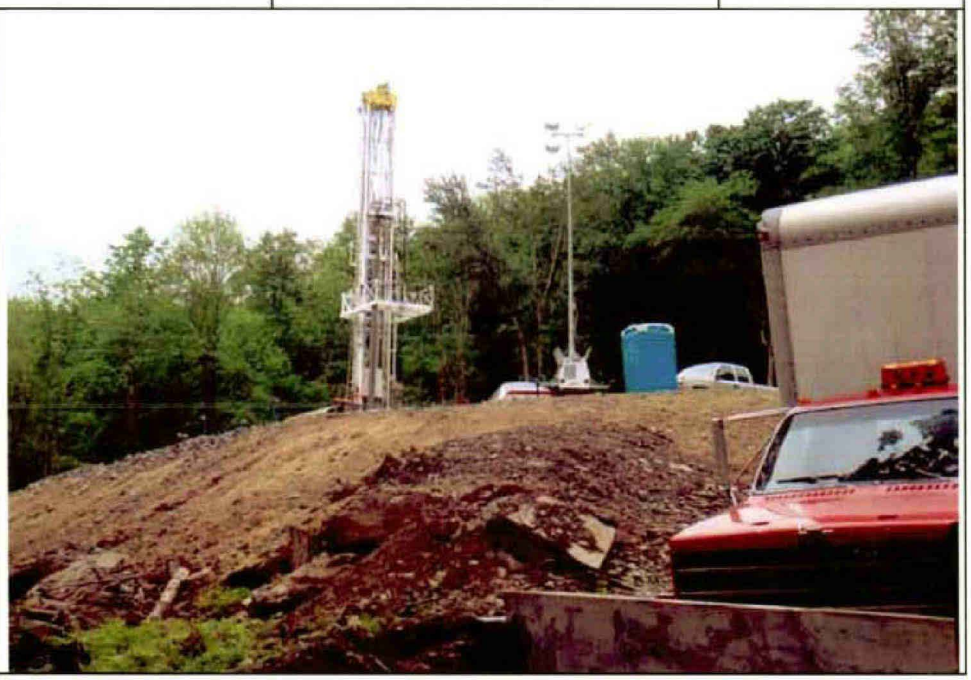


Photo No.	Date:
2	6/05/08

Direction Photo Taken:

Description:

Area of initial release from break in supply line.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
3	6/05/08

Direction Photo Taken:

North

Description:

Drainage along road from seep area at the edge of the drill pad at spill location to underflow culvert.

Photo No.	Date:
4	6/05/08

Direction Photo Taken:

Northeast

Description:

Inlet to culvert to underflow dam.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
5	6/05/08

Direction Photo Taken:

Southeast

Description:

Underflow dam.

Photo No.	Date:
6	6/05/08

Direction Photo Taken:

East

Description:

Silt fence and straw bales preventing downhill migration. Location of Sample #9.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
7	6/05/08

Direction Photo Taken:

Northwest

Description:

Path of drainage flow downhill from the underflow drain to the entry into flooded depression area.

Photo No.	Date:
8	6/05/08

Direction Photo Taken:

North

Description:

Flow entry into flooded depression area.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
9	6/05/08

Direction Photo Taken:

South

Description:

Earthen dam at end of flooded depression area constructed to restrict migration of spilled diesel (after spill cleanup).

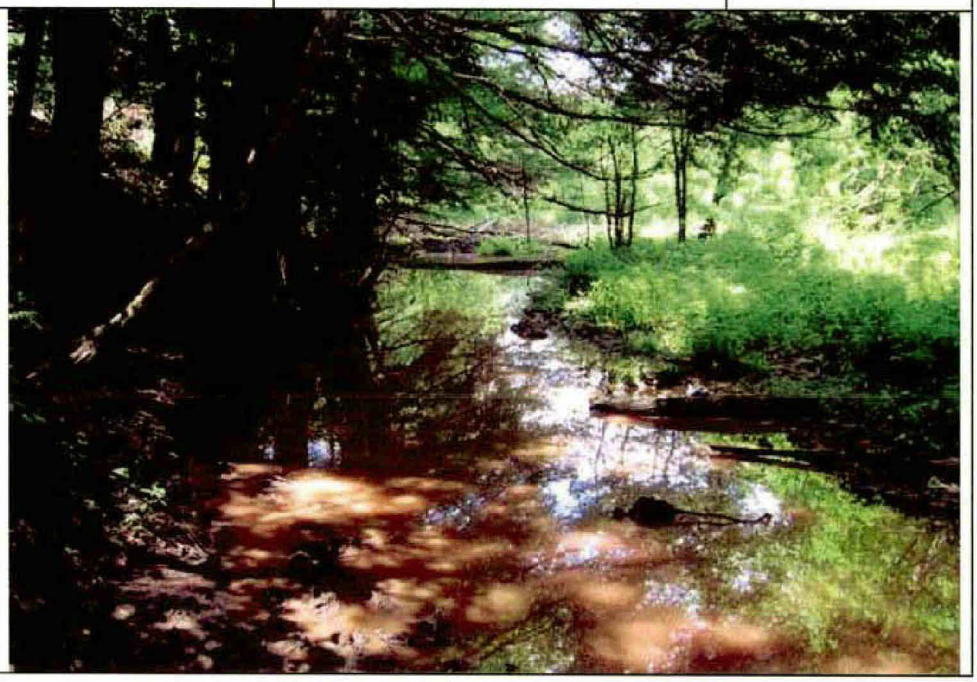


Photo No.	Date:
10	6/05/08

Direction Photo Taken:

Description:

Absorbent pads in diesel-impacted flooded depression.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
11	6/05/08

Direction Photo Taken:

South

Description:

Absorbent pads and booms in diesel-impacted flooded depression.

Photo No.	Date:
12	6/05/08

Direction Photo Taken:

South

Description:

Absorbent pads and booms in diesel-impacted flooded depression.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
13	6/05/08

Direction Photo Taken:

North

Description:

Absorbent pads and booms in diesel-impacted flooded depression.

Photo No.	Date:
14	6/05/08

Direction Photo Taken:

Northwest

Description:

Absorbent pads and booms in diesel-impacted flooded depression.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
15	6/05/08

Direction Photo Taken:

West

Description:

Workers recovering sorbed diesel (absorbent pads and booms) storing the material in drums, for subsequent staging.

Photo No.	Date:
16	6/05/08

Direction Photo Taken:

Southwest

Description:

Diesel recovery via absorbent material from underflow dam (culvert under the road) on the hillside adjacent the road.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
17	6/05/08

Direction Photo Taken:

Southwest

Description:

Discharge from the underflow dam.

Photo No.	Date:
18	6/05/08

Direction Photo Taken:

North

Description:

Sorbent material being used to recover diesel migrating from the drillpad to the culvert under the road.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
19	6/05/08

Direction Photo Taken:

Northwest

Description:

Excavation of recovery trenches in drill pad wellsite to recover diesel.

Photo No.	Date:
20	6/05/08

Direction Photo Taken:

Northwest

Description:

Excavation of recovery trenches in drill pad wellsite to recover diesel.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
21	6/05/08

Direction Photo Taken:

Northwest

Description:

Absorbent material in recovery trenches in drill pad wellsite to recover diesel.

Photo No.	Date:
22	6/05/08

Direction Photo Taken:

North

Description:

Earthen dam constructed on the north side of the flooded depression area that contained the spill and prevented migration of diesel downstream. Photograph is taken about two days after the spill occurred.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
23	6/05/08

Direction Photo Taken:

North

Description:

Flooded depression area that contained the spill. Photograph is taken about two days after the spill occurred.

Photo No.	Date:
24	6/05/08

Direction Photo Taken:

South

Description:

Test pit in spill area.

URS

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.
GasSearch Drilling Services Corporation	Susquehanna County, Pennsylvania	39938633

Photo No.	Date:
25	6/05/08

Direction Photo Taken:

West

Description:

Test pit #2 (Sample #3) in drill pad area.

Photo No.	Date:
26	6/05/08

Direction Photo Taken:

East

Description:

Test pit #4, sample #6 in drill pad area.

APPENDIX B

NOTICE OF INTENT TO REMEDIATE
AND
NEWSPAPER NOTIFICATION

2530-FM-BWM0019 Rev. 10/2006

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

NOTICE OF INTENT TO REMEDIATE

Act 1995-2 requires 4 general informational items to be included in the NIR: the general location, listing of contaminants, intended use of the property, and proposed remediation measures. In addition attach a site map if available.

Property Name [redacted] #5 Wellsite

Address/Location Button Lane

City Springville **Zip Code** 18801

Municipality (if more than one, list all) Springville Township

County Susquehanna County

Latitude 41 N °(deg.) 42 '(min) 42.19 "(sec) **Longitude** 75 W °(deg.) 52 '(min) 13.66 "(sec)

Horizontal Collection Method: USGS Quadrangle

Horizontal Reference Datum: NAD85 **Reference Point:** Center of property

Wish to participate in the DEP/EPA MOA: ☐

Contact Dave Hess at dahess@state.pa.us for details.

EPA ID Number, if known:

Provide a general description of the site contamination in plain language (e.g. fuel oil spill, historical chemical industrial area contamination), the names of any known primary contaminants to be addressed, and the intended future use of the property:

The [redacted] #5 wellsite is being used for the production of natural gas. During drilling operations, a diesel fuel release occurred. Immediate action was taken when the release was discovered to clean up the release. Remedial actions included recovery of diesel product and bioremediation to clean up the release and residual impacts. Soil and surface water were the only media affected by the release.

The expected future use of the Site will be for the production of natural gas; however, the site has been remediated in compliance with Residential Statewide Health Clean Up Standards.

Provide a general description of proposed remediation measures:

The Site has been remediated to meet Residential Statewide Health Standards established under the Land Recylcling Program. Remedial actions have included the following:

- Immediate measures to eliminate the source of the release;
- Removal of all free diesel product from site media (soil and surface water); and
- Bioremediation to remediate residual impacts.

Will remediation be to a site-specific standard ☐ or as a special industrial area ☐? If so, the municipality or municipalities must be provided 30-day comment period.
Remediator/Property Owner/Consultant. For each of these recipients of the approval of the final report, complete form below.

Remediator
Contact Person: Kevin Rogier
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Contractor/Remediator
Phone Number: 304-562-0758
Company Name: GasSearch Drilling Services Corporation
Address (street, city, state, zip): 2399 Virginia Avenue, Culloden, WV 25510
Email Address: kevin.rogier@gassearch.net
Property Owner
Contact Person: [redacted]
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Owner
Phone Number:
Company Name: N/A
Address (street, city, state, zip): [redacted]
Email Address:
Property Lesee
Contact Person: Ex. 6 - Personal Privacy
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Lessee
Phone Number: 412-249-3850
Company Name: Cabot Oil & Gas Corporation
Address (street, city, state, zip): 5 Penn Center West, Suite 401, Pittsburgh, PA 15276
Email Address: Phil.Stalnaker@cabotog.com
Consultant
Contact Person: James Pinta Jr., Ph.D., P.G.
Relationship to site (e.g. owner, remediator, participating in cleanup, consultant): Consultant
Phone Number: 412-503-4602
Company Name: URS Corporation
Address (street, city, state, zip): Foster Plaza 4, 501 Holiday Dr, Suite 300, Pittsburgh, PA 15220
Email Address: James_Pinta@urscorp.com

Preparer of Notice of Intent to Remediate:

Name: James Pinta, Jr., PhD., PG

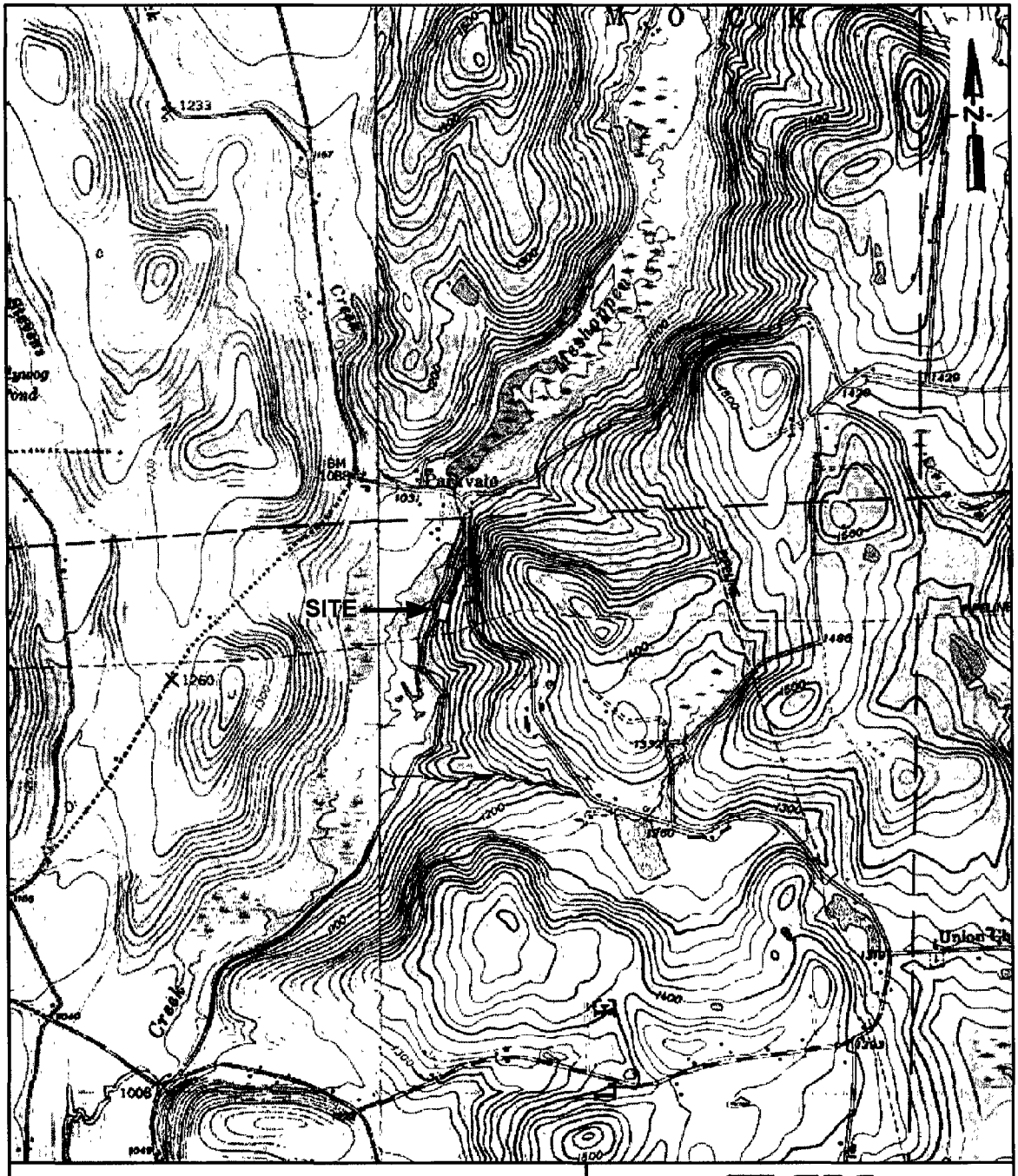
Title: Principal Geologist

Address: URS Corporation
Foster Plaza 4, 501 Holiday Dr, Suite 300
Pittsburgh, PA 15220

Telephone: 412-503-4602

Email Address: James_Pinta@urscorp.com

Email Image File of Site Map showing property lines and general area of site(s) to be remediated to: (landrecycling@state.pa.us)



0 2000 4000

APPROXIMATE SCALE IN FEET

BASE MAP SOURCE: USGS 7.5 minute series topographic quadrangle map Springville, Pennsylvania (1946, photorevised 1969) and Hop Bottom, Pennsylvania (1994).

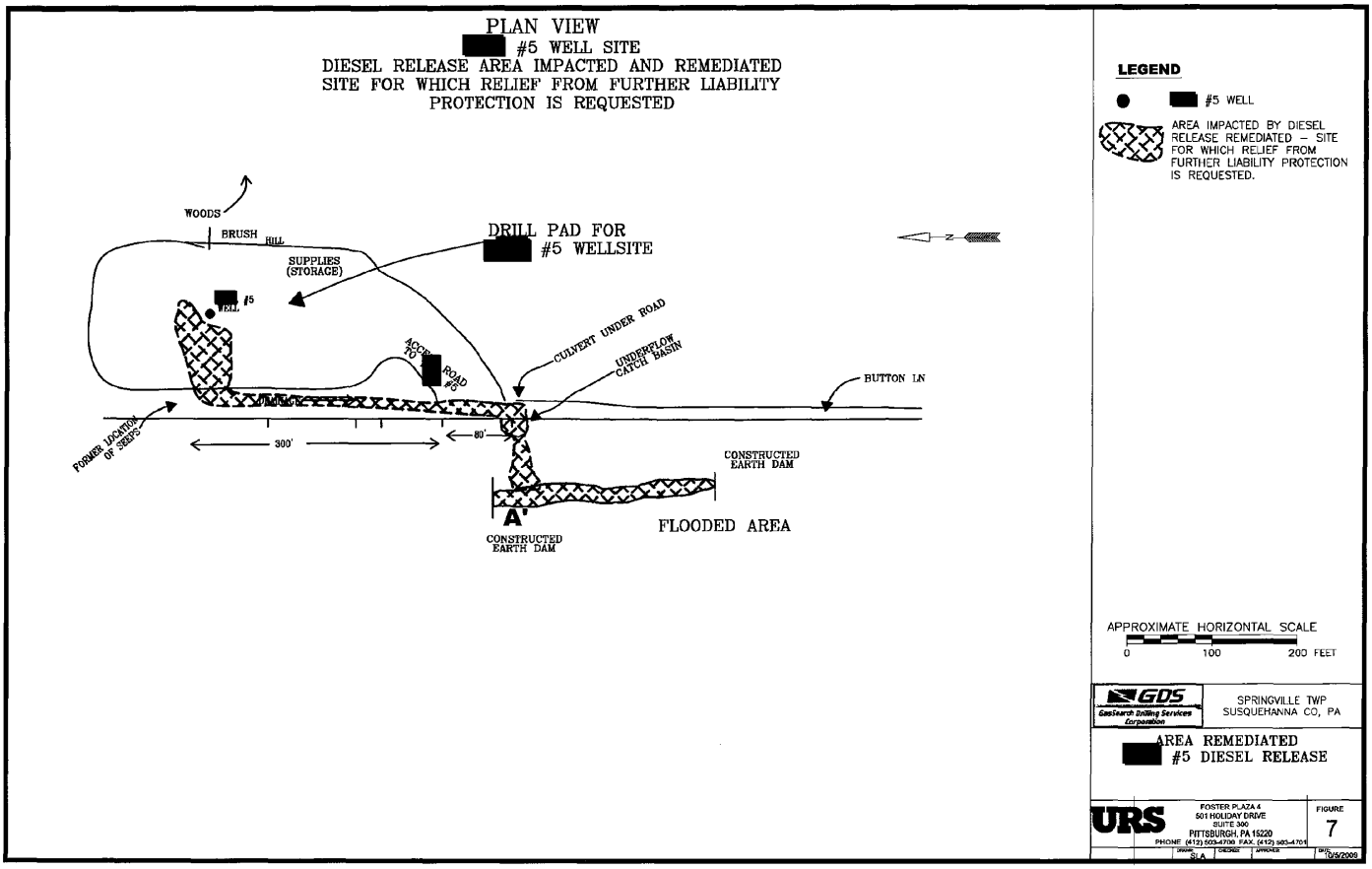
GDS
GasSearch Drilling Services Corporation

FIGURE 1
SITE VICINITY MAP
[redacted]5
SUSQUEHANNA COUNTY PENNSYLVANIA

URS

CABOT-EPA 007873

DIM0206031 DIM0206109



CABOT-EPA 007874

DIM0206031

DIM0206110

URS

SENT VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 29, 2009

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

RE: [redacted] #5 Wellsite
Springville Township
Susquehanna County

Dear Supervisor Wood:

The Land Recycling and Environmental Remediation Standards Act (Act 2) requires that a Notice of Intent to Remediate (NIR) a site be provided to the municipality in which the site is located. In accordance with this provision of Act 2, we are formally notifying you of our intent to remediate the subject Site that had a release of diesel fuel on June 3, 2008. A copy of the Notice of Intent to Remediate, which has been sent to the Pennsylvania Department of Environmental Protection (PADEP), is enclosed. The notice will also be published in the *Susquehanna County Pennsylvania Independent Weekender*, a local newspaper.

Should you have any questions or comments regarding the remediation, please contact Mr. Phil Stalnaker, Cabot Oil & Gas Corporation, at 412-249-3850.

Sincerely,

URS Corporation

James Pinta Jr., Ph.D., P.G.
Principal Geologist

Attachment: NIR

URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

URS

SENT VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

October 29, 2009

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

RE: [redacted] #5 Wellsite
Springville Township
Susquehanna County

Dear Supervisor Wood:

Under the provision of the Land Recycling and Environmental Standards Act, the Act of May 19, 1995, P.L. 4, No. 2. notice is hereby given that URS Corporation, on behalf of GasSearch Drilling Services Corporation (GDS) has submitted a Final Report to the Department of Environmental Protection for the [redacted] #5 wellsite, Springville Township, Susquehanna County leased by Cabot Oil & Gas Corporation. The Final Report documents that the remediation performed to address a diesel release that occurred at the Site on June 3, 2008 has attained compliance with the Residential Statewide Health Clean Up Standards under Act 2.

Sincerely,

URS Corporation

James Pinta Jr., Ph.D., P.G.
Principal Geologist

URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

URS

URS Corporation
Foster Plaza 4
501 Holiday Drive
Suite 300
Pittsburgh, PA 15220

7009 1410 0001 7025 0533

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

CABOT-EPA 007877

URS

URS Corporation
Foster Plaza 4
501 Holiday Drive
Suite 300
Pittsburgh, PA 15220

CERTIFIED MAIL

7009 1410 0001 7025 0540

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 1410 0001 7025 0540

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS. FOLD AT DOTTED LINE

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Edwin Wood, Supervisor
P. O. Box 32
Springville, PA 18844

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7009 1410 0001 7025 0533

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

Pennsylvania Department of Environmental Protection

2 Public Square
Wilkes-Barre, PA 18711-0790
October 28, 2009

Northeast Regional Office

570-826-2511
Fax 570-820-4907

Mr. [redacted]

Re: ECP – Special Projects – Act 2
Receipt of Notice of Intent to Remediate
[redacted] Property – Well No. 5
eFACTS Site #706901, Primary Facility #707295
Remediation #39259
Herb Button Road
Springville Township, Susquehanna County

Dear Mr. [redacted]

This letter confirms the Department of Environmental Protection's October 22, 2009 receipt of a Notice of Intent to Remediate (NIR) for the property named above. The NIR was submitted in accordance with the provisions of the Land Recycling and Remediation Standards Act (Act 2) by James Pinta, Jr., URS Corporation, concerning the remediation of diesel fuel found to be present in soil and surface water at the property location cited above due to a release during well drilling operations. The NIR suggests that the site will be remediated to meet the residential Statewide Health Standard under Act 2.

The procedures set forth in Act 2 must be followed in order for your site to qualify for the liability protection provided by the Act. Please ensure that the proper municipal and public notifications of your Notice of Intent to Remediate submission have been satisfied.

When received, the Department will have 60 days to review the Final Report. If we do not respond with deficiencies within the 60-day timeframe, the report will be deemed approved. You will receive a letter advising you of the Department's action at that time. If the report documents that the impacted environmental media (soil and /or groundwater) meet the selected Act 2 cleanup standard(s), then the property owner of record, as well as any other party that participated in the remediation, would be relieved of liability for any resulting contamination directly related to the specified release(s).

If you have any questions pertaining to the remediation process or requirements of Act 2, please contact Eric Rooney, Site Project Officer from the Department's Storage Tank Section of the Environmental Cleanup Program. Mr. Rooney or I can be reached at the above-listed telephone number.

Sincerely,

Thomas M. Thompson, P.G.
Special Projects Section Manager
Environmental Cleanup Program

cc: James Pinta, Jr., PhD., PG/URS Corporation
Mr. Phillip Stalnaker/Cabot Oil & Gas Corporation
Mr. Kevin Rogier/GasSearch Drilling Services Corporation

APPENDIX C

LABORATORY ANALYTICAL REPORTS

C-1 - June 2008

C-2 – October 9, 2008

C-3 – May 9, 2009

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

July 7, 2008

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Dear Mr. Pinta:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on June 20, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-4662 when inquiring about this report.

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Pace Sample Identification	Client Sample Identification
0806-3399	#1
0806-3400	#2
0806-3401	#3
0806-3402	#4
0806-3403	#5

Pace Sample Identification	Client Sample Identification
0806-3404	#6
0806-3405	#7
0806-3406	#8
0806-3407	#9
0806-3408	#10

General Comments: Cooler temperature 8.8 ° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

Page 1 of 12

REPORT OF LABORATORY ANALYSIS

nelac

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: **08-4662**
Lab Sample ID: **0806-3399**
Client Sample ID: #1
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax. 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3400
Client Sample ID: #2
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1638 Roseytown Rd
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Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3401
Client Sample ID: #3
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	91	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.5	5.5	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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www.pacelabs.com

Pace Analytical Services, Inc.
1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3402
Client Sample ID: #4
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3403
Client Sample ID: #5
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	86	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID:	**08-4662**
Lab Sample ID:	**0806-3404**
Client Sample ID:	#6
Sample Matrix:	Solid
Date Sampled:	06/19/2008
Date Received:	06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	90	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

nelac

CABOT-EPA 007888

DIM0206031 DIM0206124

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID:	**08-4662**
Lab Sample ID:	**0806-3405**
Client Sample ID:	#7
Sample Matrix:	Solid
Date Sampled:	06/19/2008
Date Received:	06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Cumene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Ethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Naphthalene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
Toluene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	06/27/2008	0074397-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

nelac

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: **08-4662**
Lab Sample ID: **0806-3406**
Client Sample ID: #8
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	56	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<470	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Cumene	8260B[1]	<470	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Ethylbenzene	8260B[1]	900	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Methyl tert-butyl ether	8260B[1]	<470	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Naphthalene	8260B[1]	2800	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Toluene	8260B[1]	580	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	8500	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	2900	470	ug/kg	JEC	06/30/2008	0074438-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. Detection limits have been elevated due to high analyte concentrations.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3407
Client Sample ID: #9
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	68	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<300	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Cumene	8260B[1]	320	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Ethylbenzene	8260B[1]	500	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Methyl tert-butyl ether	8260B[1]	<300	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Naphthalene	8260B[1]	3800	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Toluene	8260B[1]	<300	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	9500	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	2900	300	ug/kg	JEC	06/30/2008	0074438-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. Detection limits have been elevated due to high analyte concentrations.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
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Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: Soil Analysis

Lab Project ID: 08-4662
Lab Sample ID: 0806-3408
Client Sample ID: #10
Sample Matrix: Solid

Date Sampled: 06/19/2008
Date Received: 06/20/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	67	N/A	%	DAB	06/24/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<330	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Cumene	8260B[1]	500	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Ethylbenzene	8260B[1]	860	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Methyl tert-butyl ether	8260B[1]	<330	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Naphthalene	8260B[1]	4000	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
Toluene	8260B[1]	<330	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	13000	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	4500	330	ug/kg	JEC	06/30/2008	0074438-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. Detection limits have been elevated due to high analyte concentrations.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page of 1203687

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: URS CORP	Report To: JAMES PINTA JR	Attention: JOHN Smelko
Address: 501 HOLIDAY DR. PITTSBURGH, PA 15220	Copy To: JAMES_PINTA@URSCORP.COM	Company Name: URS CORP
Email To:	Purchase Order No.:	Address: #4 MISSION WAY #201
Phone: 412-503-4160 Fax	Project Name: CABOT 01	Pace Quote Reference: SCOTT DEPOT W.VA
Requested Due Date/TAT: 2-Week	Project Number:	Pace Project Manager: 25565
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE:

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / , -) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	PA Act 2 Diesel Short List (10 yr)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	#1	SL	G	6/19/08	10:00 AM														✓		08026-3399
2	#2	SL	G		10:05 AM														✓		3400
3	#3				10:15 AM														✓		01
4	#4				10:20 AM														✓		02
5	#5				10:45 AM														✓		03
6	#6				10:50 AM														✓		04
7	#7				11:00 AM														✓		05
8	#8				11:20 AM														✓		06
9	#9				11:40 AM														✓		07
10	#10				11:50 AM														✓		08
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	James Pinta Jr	6/19/08	4:30 PM	Samantha Bryant	9/20/08	1015	8.8	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: James Pinta JR

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 6/19/08

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days

F-ALL-Q-020rev 07, 15-May-2007

CABOT-EPA 007893

DIM0206031 DIM0206129

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July 7, 2008

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Dear Mr. Pinta:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on June 28, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-4856 when inquiring about this report.

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Pace Sample Identification	Client Sample Identification
0806-4682	Cabot-01
0806-4683	Cabot-02
0806-4684	Cabot-03
0806-4685	Cabot-Trip

General Comments: Cooler temperature 5.4 ° C upon receipt. Ice was present. This report has been reissued on July 14, 2008 in order to lower the reporting limit for Benzene per the Client's request. Please replace the original report with the revised report enclosed.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

Page 1 of 6

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: **08-4856**
Lab Sample ID: **0806-4682**
Client Sample ID: Cabot-01
Sample Matrix: Aqueous

Date Sampled: 06/27/2008
Date Received: 06/28/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<1.0	1.0	ug/l	EAC	07/02/2008	0074564-1	<1.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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Mr. James Pinta
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Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-4856
Lab Sample ID: 0806-4683
Client Sample ID: Cabot-02
Sample Matrix: Aqueous

Date Sampled: 06/27/2008
Date Received: 06/28/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<1.0	1.0	ug/l	EAC	07/02/2008	0074564-1	<1.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

CABOT-EPA 007896

DIM0206031 DIM0206132

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-4856
Lab Sample ID: 0806-4684
Client Sample ID: Cabot-03
Sample Matrix: Aqueous

Date Sampled: 06/27/2008
Date Received: 06/28/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<1.0	1.0	ug/l	EAC	07/02/2008	0074564-1	<1.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

nelac

CABOT-EPA 007897

DIM0206031 DIM0206133

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-4856
Lab Sample ID: 0806-4685
Client Sample ID: Cabot-Trip
Sample Matrix: Aqueous

Date Sampled: 06/27/2008
Date Received: 06/28/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<1.0	1.0	ug/l	EAC	07/02/2008	0074564-1	<1.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	07/02/2008	0074564-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

CABOT-EPA 007898

DIM0206031 DIM0206134

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1114322

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: UES Co.	Report To:	Attention:
Address:	Copy To:	Company Name:
		Address:
Email To:	Purchase Order No:	Pace Quote Reference:
Phone: Fax:	Project Name:	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location STATE: PA

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Cabot - 01A	WT		6/12/08	14:00				1				X							08040610
2	Cabot - 01B			"	14:00				1				X							1
3	Cabot - 01C			"	14:00				1				X							33
4	Cabot - 02A			"	14:15				1				X							
5	Cabot - 02B			"	14:15				1				X							
6	Cabot - 02C			"	14:15				1				X							
7	Cabot - 03A			"	14:40				1				X							
8	Cabot - 03B			"	14:40				1				X							
9	Cabot - 03C			"	14:40				1				X							
10	Cabot - 02T (TRIP)			"					1				X							
11	Cabot - 02T (TRIP)			"					1				X							
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
				FedEx			
	FedEx	6/13/08	1130		6/13/08	1130	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY)

SAMPLE CONDITIONS: Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

CABOT-EPA 007899

DIM0206031

DIM0206135

Pace Analytical®
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October 27, 2008

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Dear Mr. Pinta:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on October 11, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-7606 when inquiring about this report.

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Pace Sample Identification	Client Sample Identification
0810-2043	Underflow Dam #1
0810-2044	Underflow Dam #2
0810-2045	Underflow Dam #3
0810-2046	Underflow Dam #4
0810-2047	TB

Pace Sample Identification	Client Sample Identification
0810-2048	Road Drainage #1
0810-2049	Road Drainage #2
0810-2050	Road Drainage #3
0810-2051	Road Drainage #4

General Comments: Cooler temperature 8.4 ° C upon receipt. Ice was present. The pre-preserved vials for all samples were over-filled, so a portion of sample from the soil jar was used for VOC analysis.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2043
Client Sample ID: Underflow Dam #1
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	54	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Cumene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Ethylbenzene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Methyl tert-butyl ether	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Naphthalene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Toluene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<9.3	9.3	ug/kg	JEC	10/20/2008	0078209-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: One internal standard recovery is outside QC limits (low). Re-analysis of the sample yielded the same result, therefore matrix interference is suspected.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
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Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2044
Client Sample ID: Underflow Dam #2
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	61	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Cumene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Ethylbenzene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Methyl tert-butyl ether	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Naphthalene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Toluene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<8.2	8.2	ug/kg	JEC	10/20/2008	0078209-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: One internal standard recovery is outside QC limits (low). Re-analysis of the sample yielded the same result, therefore matrix interference is suspected.

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Mr. James Pinta
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Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2045
Client Sample ID: Underflow Dam #3
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	66	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Cumene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Ethylbenzene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Methyl tert-butyl ether	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Naphthalene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Toluene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<7.7	7.7	ug/kg	JEC	10/20/2008	0078209-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: One internal standard recovery is outside QC limits (low). Re-analysis of the sample yielded the same result, therefore matrix interference is suspected.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
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Construction Services Division
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501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2046
Client Sample ID: Underflow Dam #4
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	68	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Cumene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Ethylbenzene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Methyl tert-butyl ether	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Naphthalene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Toluene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<7.3	7.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Mr. James Pinta
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Foster Plaza 4
501 Holiday Drive, Suite 300
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Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2047
Client Sample ID: TB
Sample Matrix: Aqueous

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
Toluene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/20/2008	0078228-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2048
Client Sample ID: Road Drainage #1
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	61	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	21	8.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Cumene	8260B[1]	19	8.5	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Ethylbenzene	8260B[1]	120	8.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Methyl tert-butyl ether	8260B[1]	<8.3	8.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Naphthalene	8260B[1]	160	8.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Toluene	8260B[1]	380	8.5	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	440	8.5	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	370	8.3	ug/kg	JEC	10/17/2008	0078185-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: One surrogate recovery is outside QC limits (high) due to sample matrix interference.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2049
Client Sample ID: Road Drainage #2
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	59	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Cumene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Ethylbenzene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Methyl tert-butyl ether	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Naphthalene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Toluene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<8.4	8.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence. VOA: Surrogate recoveries are outside QC limits (high), however, no target compounds were detected above the reporting limit.

REPORT OF LABORATORY ANALYSIS

nelac

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2050
Client Sample ID: Road Drainage #3
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	72	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<7.1	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Cumene	8260B[1]	<7.0	7.0	ug/kg	JEC	10/20/2008	0078209-1	<5.0
Ethylbenzene	8260B[1]	68	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Methyl tert-butyl ether	8260B[1]	<7.1	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Naphthalene	8260B[1]	130	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Toluene	8260B[1]	<7.0	7.0	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	300	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	90	7.1	ug/kg	JEC	10/17/2008	0078185-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00005

Lab Project ID: 08-7606
Lab Sample ID: 0810-2051
Client Sample ID: Road Drainage #4
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	78	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<6.4	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Cumene	8260B[1]	<6.4	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Ethylbenzene	8260B[1]	18	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Methyl tert-butyl ether	8260B[1]	<6.4	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Naphthalene	8260B[1]	47	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
Toluene	8260B[1]	<6.5	6.5	ug/kg	JEC	10/20/2008	0078209-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	120	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	35	6.4	ug/kg	JEC	10/17/2008	0078185-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1208186

Section A
Required Client Information:
Company: URS
Address: Foster Plaza 4
501 Holiday Drive, St 300 Pittsburg PA 15220
Email To:
Phone: 412 934 [illegible] Fax:
Requested Due Date/TAT:

Section B
Required Project Information:
Report To: Jim Pinta
Copy To:
Purchase Order No.:
Project Name: Cabot O&G [redacted] #5
Project Number: 39939143.09003

Section C
Invoice Information:
Attention: Paul Hartman
Company Name: Cabot O&G
Address: RR 6 Rt 29 Box 6110 [illegible]
Pace Quote Reference:
Pace Project Manager: [illegible]
Pace Profile #:

REGULATORY AGENCY
NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE: PA

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

08-07600

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4 (Sodium Bisulfate)	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Underflow Dam #1	SL	G	10/9/08	1420	—	—		4	1	2					1			4	N	0810-2043
2	Underflow Dam #2	SL	G	10/9/08	1430	—			4	1	2					1			4	N	44
3	Underflow Dam #3	SL	G	10/9/08	1435	—			4	1	2					1			4	N	45
4	Underflow Dam #4	SL	G	10/9/08	1445	—			4	1	2					1			4	N	46
5	TB			9/4/08		—			2				2						2	N	47
6	Road Drainage #1	SL	G	10/9/08	1620	—			4	1	2					1			4	N	48
7	Road Drainage #2	SL	G	10/9/08	1610	—			4	1	2					1			4	N	49
8	Road Drainage #3	SL	G	10/9/08	1605	—			4	1	2					1			4	N	50
9	Road Drainage #4	SL	G	10/9/08	1555	—			4	1	2					1			4	N	51
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature]	10/9/08	1700							
	Fed Ex			Justin [illegible]	10/11/08	1145	8.1	Y	N	Y
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

2

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER:
SIGNATURE of SAMPLER:
DATE Signed (MM/DD/YY):

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

CABOT-EPA 007910

Pace Analytical®
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October 27, 2008

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Dear Mr. Pinta:

Enclosed are analytical results for samples submitted to Pace Analytical by URS Corporation. The samples were received on October 11, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-7605 when inquiring about this report.

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Pace Sample Identification	Client Sample Identification
0810-2030	TB
0810-2031	Soil Sample in Excavator #1
0810-2032	Soil Sample in Excavator #2
0810-2033	Soil Sample in Excavator #3
0810-2034	Soil Sample in Excavator #4
0810-2035	Soil Sample in Excavator #5
0810-2036	Soil Sample in Excavator #6

Pace Sample Identification	Client Sample Identification
0810-2037	Soil Sample in Excavator #7
0810-2038	Soil Sample in Excavator #8
0810-2039	Soil Sample #1
0810-2040	Soil Sample #2
0810-2041	Soil Sample #3
0810-2042	Soil Sample #4

General Comments: Cooler temperature 7.4 ° C upon receipt. Ice was present. The pre-preserved vials for all samples were over-filled, so a portion of sample from the soil jar was used for VOC analysis.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Raelyn E. Sylvester
Project Manager

REC: jld

Enclosures

REPORT OF LABORATORY ANALYSIS

nelac

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Mr. James Pinta
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Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2030
Client Sample ID: TB
Sample Matrix: Aqueous

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
Cumene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
Ethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
Naphthalene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
Tofuene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.0	5.0	ug/l	EAC	10/16/2008	0078081-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported on an as received basis.

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501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: **08-7605**
Lab Sample ID: **0810-2031**
Client Sample ID: Soil Sample in Excavator #1
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	90	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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501 Holiday Drive, Suite 300
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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2032
Client Sample ID: Soil Sample In Excavator #2
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	88	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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501 Holiday Drive, Suite 300
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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2033
Client Sample ID: Soil Sample in Excavator #3
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	88	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: **08-7605**
Lab Sample ID: **0810-2034**
Client Sample ID: Soil Sample in Excavator #4
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	88	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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Mr. James Pinta
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Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2035
Client Sample ID: Soil Sample in Excavator #5
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	94	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.3	5.3	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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501 Holiday Drive, Suite 300
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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2036
Client Sample ID: Soil Sample in Excavator #6
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	90	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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501 Holiday Drive, Suite 300
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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2037
Client Sample ID: Soil Sample in Excavator #7
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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CABOT-EPA 007919

DIM0206031 DIM0206155

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Mr. James Pinta
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Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2038
Client Sample ID: Soil Sample in Excavator #8
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	93	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.4	5.4	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Pace Analytical Services, Inc.
1638 Roseytown Rd
Suites 2, 3 & 4
Greensburg, PA 15601
Phone: 724.850.5600
Fax: 724.850.5601

Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2039
Client Sample ID: Soil Sample #1
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	88	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.7	5.7	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2040
Client Sample ID: Soil Sample #2
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	89	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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CABOT-EPA 007922

DIM0206031 DIM0206158

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Mr. James Pinta
URS Corporation
Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2041
Client Sample ID: Soil Sample #3
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	87	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.8	5.8	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

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Construction Services Division
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

Client Site: Cabot Oil
Client Ref.: 39939193.00003

Lab Project ID: 08-7605
Lab Sample ID: 0810-2042
Client Sample ID: Soil Sample #4
Sample Matrix: Solid

Date Sampled: 10/09/2008
Date Received: 10/11/2008

Inorganic Extraction

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Percent Solids	% Solids	90	N/A	%	DAB	10/16/2008	N/A	N/A

Volatiles

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Volatile Organic Compounds, MS								
Benzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Cumene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Ethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Methyl tert-butyl ether	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Naphthalene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
Toluene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,2,4-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0
1,3,5-Trimethylbenzene	8260B[1]	<5.6	5.6	ug/kg	JEC	10/17/2008	0078181-1	<5.0

[1] U.S. Environmental Protection Agency, 1996, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Sample Comments: Results reported in dry weight equivalence.

REPORT OF LABORATORY ANALYSIS

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2 — 1208187

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information
Company: [illegible]	Report To: Tim Finta	Attention: Paul Hoffman
Address: Foster Plaza 4	Copy To:	Company Name: Cabot Oil
[illegible]		Address: [illegible]
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone: [illegible] Fax:	Project Name: Cabot PA [redacted]45	Pace Project Manager: Reviewed
Requested Due Date/TAT:	Project Number: 3493793 [illegible]	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location: STATE: PA

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other CT

SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test: VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB	WT	G	9/30/08	—	—	—	[illegible]	2				2					2	N	08-07605
2	Soil Sample in Accumulation #1	SL	G	9/30/08	1140	—	—		4	1		2					1	4		0810-2030 31
3	2	SL	G	9/30/08	1145	—	—		4	1		2					1	4		32
4	3	SL	G		1150	—	—		4	1		2					1	4		33
5	4	SL	G		1945	—	—		4	1		2					1	4		34
6	5	SL	G		2010	—	—		4	1		2					1	4		35
7	6	SL	G		2015	—	—		4	1		2					1	4		36
8	7	SL	G		2020	—	—		4	1		2					1	4		37
9	8	SL	G	V	2025	—	—		4	1		2					1	4		38
10	Soil Sample #1	SL	G		1935	—	—		4	1		2					1	4		39
11	Soil Sample 2	SL	G		1930	—	—		4	1		2					1	4		40
12	Soil Sample 3, 4	SL	G	V	1915/1915	—	—		4	1		2					1	4		Rest remain at lab

41/42

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	[illegible]	10/1/08	1200							
	Fed Ex			Justin Orr	10/1/08	1145	7.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

2

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev 07, 15-May-2007

CABOT-EPA 007925

DIM0206031

DIM0206161

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May 26, 2009

Mr. Jim Pinta
URS Corporation
Foster Plaza 4
501 Holiday Drive, Suite 300
Pittsburgh, PA 15220

RE: Project: [redacted] #5
Pace Project No.: 309918

Dear Mr. Pinta:
Enclosed are the analytical results for sample(s) received by the laboratory on May 13, 2009. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Raelyn Sylvester

raelyn.sylvester@pacelabs.com
Project Manager

Enclosures

cc: Mr. John Smelko, URS Corporation

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
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CERTIFICATIONS

Project [redacted] #5
Pace Project No.: 309918

Pennsylvania Certification IDs

Wyoming Certification #: 8TMS-Q
Wisconsin/PADEP Certification
West Virginia Certification #: 143
Washington Certification #: C1941
Virginia Certification #: 00112
Virgin Island/PADEP Certification
Utah/NELAC Certification # ANTE
Texas/NELAC Certification # T104704188-09 TX
Tennessee Certification # TN2867
South Dakota Certification
Puerto Rico Certification #: PA01457
Pennsylvania/NELAC Certification #: 65-282
Oregon/NELAC Certification #: PA200002
North Carolina Certification #: 42706
New York/NELAC Certification #: 10888
New Mexico Certification
New Jersey/NELAC Certification #: PA 051
New Hampshire/NELAC Certification #: 2976
Nevada Certification
Montana Certification # Cert 0082
Missouri Certification #: 235
Minnesota Certification #: 042-999-425
Michigan/PADEP Certification
Massachusetts Certification #: M-PA1457
Maryland Certification #: 308
Maine Certification # PA0091
Louisiana/NELAC Certification # LA080002
Louisiana/NELAC Certification # 4086
Kentucky Certification #: 90133
Kansas/NELAC Certification # E-10358
Iowa Certification #: 391
Indiana/PADEP Certification
Illinois/PADEP Certification
Idaho Certification
Hawaii/PADEP Certification
Guam/PADEP Certification
Georgia Certification # 968
Florida/NELAC Certification #: E87683
Delaware Certification
Connecticut Certification # PH 0694
Colorado Certification
California/NELAC Certification #: 04222CA
Arkansas Certification
Arizona Certification # AZ0734
Alabama Certification # 41590

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SAMPLE ANALYTE COUNT

Project [redacted]5
Pace Project No 309918

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
309918001	**TB-1**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918002	**TB-2**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918003	**TB-3**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918004	**TB-4**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918005	**TB-5**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918006	**TB-6**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918007	**TB-7**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918008	**TB-8**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA
309918009	**TB-9**	ASTM D2974-87	DSC	1	PASI-PA
		EPA 8260	JEW	11	PASI-PA

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ANALYTICAL RESULTS

Project: [redacted] #5
Pace Project No: 309918

Sample: TB-1 **Lab ID: 309918001** Collected: 05/12/09 13.55 Received 05/13/09 15 15 Matrix Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	7.0	1		05/15/09 18:19	71-43-2	
Ethylbenzene	ND	ug/kg	7.0	1		05/15/09 18:19	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	7.0	1		05/15/09 18:19	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	7.0	1		05/15/09 18:19	1634-04-4	
Naphthalene	**15.8**	ug/kg	7.0	1		05/15/09 18:19	91-20-3	
Toluene	**13.7**	ug/kg	7.0	1		05/15/09 18:19	108-88-3	
1,2,4-Trimethylbenzene	**41.3**	ug/kg	7.0	1		05/15/09 18:19	95-63-6	
1,3,5-Trimethylbenzene	**20.9**	ug/kg	7.0	1		05/15/09 18:19	108-67-8	
Toluene-d8 (S)	98	%	70-130	1		05/15/09 18:19	2037-26-5	
4-Bromofluorobenzene (S)	85	%	70-130	1		05/15/09 18:19	460-00-4	
1,2-Dichloroethane-d4 (S)	122	%	70-130	1		05/15/09 18:19	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**33.7**	%	0.10	1		05/18/09 12:44		

REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project [redacted] #5
Pace Project No. 309918

Sample: TB-2 **Lab ID: 309918002** Collected 05/12/09 14:15 Received: 05/13/09 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.6	1		05/15/09 18:47	71-43-2	
Ethylbenzene	**73.1**	ug/kg	5.6	1		05/15/09 18:47	100-41-4	
Isopropylbenzene (Cumene)	**19.7**	ug/kg	5.6	1		05/15/09 18:47	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.6	1		05/15/09 18:47	1634-04-4	
Naphthalene	**39.7**	ug/kg	5.6	1		05/15/09 18:47	91-20-3	
Toluene	ND	ug/kg	5.6	1		05/15/09 18:47	108-88-3	
1,2,4-Trimethylbenzene	**244**	ug/kg	5.6	1		05/15/09 18:47	95-63-6	
1,3,5-Trimethylbenzene	**82.2**	ug/kg	5.6	1		05/15/09 18:47	108-67-8	
Toluene-d8 (S)	93	%	70-130	1		05/15/09 18:47	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1		05/15/09 18:47	460-00-4	
1,2-Dichloroethane-d4 (S)	125	%	70-130	1		05/15/09 18:47	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**32.9**	%	0.10	1		05/18/09 12:45		

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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: [redacted] #5
Pace Project No. 309918

Sample: TB-3 **Lab ID: 309918003** Collected 05/12/09 14:25 Received: 05/13/09 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	7.0	1		05/15/09 19:14	71-43-2	
Ethylbenzene	**21.1**	ug/kg	7.0	1		05/15/09 19:14	100-41-4	
Isopropylbenzene (Cumene)	**9.7**	ug/kg	7.0	1		05/15/09 19:14	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	7.0	1		05/15/09 19:14	1634-04-4	
Naphthalene	**22.6**	ug/kg	7.0	1		05/15/09 19:14	91-20-3	
Toluene	ND	ug/kg	7.0	1		05/15/09 19:14	108-88-3	
1,2,4-Trimethylbenzene	**133**	ug/kg	7.0	1		05/15/09 19:14	95-63-6	
1,3,5-Trimethylbenzene	**52.1**	ug/kg	7.0	1		05/15/09 19:14	108-67-8	
Toluene-d8 (S)	98	%	70-130	1		05/15/09 19:14	2037-26-5	
4-Bromofluorobenzene (S)	102	%	70-130	1		05/15/09 19:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130	1		05/15/09 19:14	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**30.3**	%	0.10	1		05/18/09 12:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: [redacted] #5
Pace Project No.: 309918

Sample: TB-4 **Lab ID: 309918004** Collected: 05/12/09 14 35 Received: 05/13/09 15 15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	7 3	1		05/15/09 19:42	71-43-2	
Ethylbenzene	ND	ug/kg	7.3	1		05/15/09 19:42	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	7.3	1		05/15/09 19:42	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	7.3	1		05/15/09 19:42	1634-04-4	
Naphthalene	ND	ug/kg	7 3	1		05/15/09 19 42	91-20-3	
Toluene	ND	ug/kg	7 3	1		05/15/09 19 42	108-88-3	
1,2,4-Trimethylbenzene	**14.0**	ug/kg	7.3	1		05/15/09 19:42	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	7.3	1		05/15/09 19:42	108-67-8	
Toluene-d8 (S)	96	%	70-130	1		05/15/09 19:42	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1		05/15/09 19 42	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		05/15/09 19 42	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**38.9**	%	0.10	1		05/18/09 12 46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project [redacted]5
Pace Project No 309918

Sample: TB-5 **Lab ID: 309918005** Collected: 05/12/09 14:43 Received 05/13/09 15:15 Matrix. Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	8.3	1		05/15/09 20:09	71-43-2	
Ethylbenzene	ND	ug/kg	8.3	1		05/15/09 20:09	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	8.3	1		05/15/09 20:09	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	8.3	1		05/15/09 20:09	1634-04-4	
Naphthalene	**13.0**	ug/kg	8.3	1		05/15/09 20:09	91-20-3	
Toluene	ND	ug/kg	8.3	1		05/15/09 20:09	108-88-3	
1,2,4-Trimethylbenzene	**8.5**	ug/kg	8.3	1		05/15/09 20:09	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	8.3	1		05/15/09 20:09	108-67-8	
Toluene-d8 (S)	96	%	70-130	1		05/15/09 20:09	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130	1		05/15/09 20:09	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		05/15/09 20:09	17060-07-0	
Percent Moisture	Analytical Method. ASTM D2974-87							
Percent Moisture	**45.9**	%	0.10	1		05/18/09 12:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project [redacted] #5
Pace Project No.: 309918

Sample: TB-6 **Lab ID: 309918006** Collected: 05/12/09 14:53 Received 05/13/09 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	7.1	1		05/15/09 20:36	71-43-2	
Ethylbenzene	ND	ug/kg	7.1	1		05/15/09 20:36	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	7.1	1		05/15/09 20:36	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	7.1	1		05/15/09 20:36	1634-04-4	
Naphthalene	ND	ug/kg	7.1	1		05/15/09 20:36	91-20-3	
Toluene	ND	ug/kg	7.1	1		05/15/09 20:36	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	7.1	1		05/15/09 20:36	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	7.1	1		05/15/09 20:36	108-67-8	
Toluene-d8 (S)	95	%	70-130	1		05/15/09 20:36	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130	1		05/15/09 20:36	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130	1		05/15/09 20:36	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**34.1**	%	0.10	1		05/18/09 12:46		

REPORT OF LABORATORY ANALYSIS

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(724)850-5600

ANALYTICAL RESULTS

Project: [redacted] #5
Pace Project No.: 309918

Sample: TB-7 **Lab ID: 309918007** Collected: 05/12/09 15:00 Received: 05/13/09 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.3	1		05/15/09 21:04	71-43-2	
Ethylbenzene	ND	ug/kg	6.3	1		05/15/09 21:04	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.3	1		05/15/09 21:04	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	6.3	1		05/15/09 21:04	1634-04-4	
Naphthalene	ND	ug/kg	6.3	1		05/15/09 21:04	91-20-3	
Toluene	ND	ug/kg	6.3	1		05/15/09 21:04	108-88-3	
1,2,4-Trimethylbenzene	ND	ug/kg	6.3	1		05/15/09 21:04	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/kg	6.3	1		05/15/09 21:04	108-67-8	
Toluene-d8 (S)	95	%	70-130	1		05/15/09 21:04	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1		05/15/09 21:04	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130	1		05/15/09 21:04	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**35.7**	%	0.10	1		05/18/09 12:47		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: [redacted] #5
Pace Project No.: 309918

Sample: TB-8 **Lab ID: 309918008** Collected: 05/12/09 15:05 Received: 05/13/09 15:15 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	5.6	1		05/15/09 21:31	71-43-2	
Ethylbenzene	**15.5**	ug/kg	5.6	1		05/15/09 21:31	100-41-4	
Isopropylbenzene (Cumene)	**11.2**	ug/kg	5.6	1		05/15/09 21:31	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	5.6	1		05/15/09 21:31	1634-04-4	
Naphthalene	**47.8**	ug/kg	5.6	1		05/15/09 21:31	91-20-3	
Toluene	ND	ug/kg	5.6	1		05/15/09 21:31	108-88-3	
1,2,4-Trimethylbenzene	**180**	ug/kg	5.6	1		05/15/09 21:31	95-63-6	
1,3,5-Trimethylbenzene	**68.7**	ug/kg	5.6	1		05/15/09 21:31	108-67-8	
Toluene-d8 (S)	99	%	70-130	1		05/15/09 21:31	2037-26-5	
4-Bromofluorobenzene (S)	103	%	70-130	1		05/15/09 21:31	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130	1		05/15/09 21:31	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974-87							
Percent Moisture	**32.9**	%	0.10	1		05/18/09 12:47		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project. [redacted] #5
Pace Project No.. 309918

Sample: TB-9 **Lab ID: 309918009** Collected: 05/12/09 15 15 Received 05/13/09 15 15 Matrix Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV PA UST	Analytical Method: EPA 8260							
Benzene	ND	ug/kg	6.7	1		05/15/09 21.59	71-43-2	
Ethylbenzene	**15.4**	ug/kg	6.7	1		05/15/09 21:59	100-41-4	
Isopropylbenzene (Cumene)	ND	ug/kg	6.7	1		05/15/09 21:59	98-82-8	
Methyl-tert-butyl ether	ND	ug/kg	6 7	1		05/15/09 21:59	1634-04-4	
Naphthalene	**7.3**	ug/kg	6 7	1		05/15/09 21.59	91-20-3	
Toluene	ND	ug/kg	6.7	1		05/15/09 21.59	108-88-3	
1,2,4-Trimethylbenzene	**31.3**	ug/kg	6.7	1		05/15/09 21:59	95-63-6	
1,3,5-Trimethylbenzene	**11.2**	ug/kg	6.7	1		05/15/09 21 59	108-67-8	
Toluene-d8 (S)	96	%	70-130	1		05/15/09 21 59	2037-26-5	
4-Bromofluorobenzene (S)	104	%	70-130	1		05/15/09 21 59	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130	1		05/15/09 21 59	17060-07-0	
Percent Moisture	Analytical Method ASTM D2974-87							
Percent Moisture	**31.3**	%	0 10	1		05/18/09 12:48		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: [redacted] #5
Pace Project No. 309918

QC Batch: MSV/2514 Analysis Method. EPA 8260
QC Batch Method: EPA 8260 Analysis Description 8260 MSV UST-SOIL
Associated Lab Samples. 309918001, 309918002, 309918003, 309918004, 309918005, 309918006, 309918007, 309918008, 309918009

METHOD BLANK 56767 Matrix. Solid
Associated Lab Samples: 309918001, 309918002, 309918003, 309918004, 309918005, 309918006, 309918007, 309918008, 309918009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	05/15/09 17:52	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	05/15/09 17:52	
Benzene	ug/kg	ND	5.0	05/15/09 17:52	
Ethylbenzene	ug/kg	ND	5.0	05/15/09 17:52	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	05/15/09 17:52	
Methyl-tert-butyl ether	ug/kg	ND	5.0	05/15/09 17:52	
Naphthalene	ug/kg	ND	5.0	05/15/09 17:52	
Toluene	ug/kg	ND	5.0	05/15/09 17:52	
1,2-Dichloroethane-d4 (S)	%	108	70-130	05/15/09 17:52	
4-Bromofluorobenzene (S)	%	108	70-130	05/15/09 17:52	
Toluene-d8 (S)	%	93	70-130	05/15/09 17:52	

LABORATORY CONTROL SAMPLE. 56768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	20	20.6	103	70-130	
1,3,5-Trimethylbenzene	ug/kg	20	21.2	106	70-130	
Benzene	ug/kg	20	19.4	97	70-130	
Ethylbenzene	ug/kg	20	21.3	106	70-130	
Isopropylbenzene (Cumene)	ug/kg	20	23.0	115	70-130	
Methyl-tert-butyl ether	ug/kg	20	17.5	87	70-130	
Naphthalene	ug/kg	20	19.4	97	70-130	
Toluene	ug/kg	20	21.0	105	70-130	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project [redacted] #5
Pace Project No.: 309918

QC Batch: PMST/1273 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples 309918001, 309918002, 309918003, 309918004, 309918005, 309918006, 309918007, 309918008, 309918009

SAMPLE DUPLICATE: 56816

Parameter	Units	309931001 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	6.7	6.9	2	

SAMPLE DUPLICATE: 56817

Parameter	Units	309931002 Result	Dup Result	RPD	Qualifiers
Percent Moisture	%	9.4	9.6	3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: [redacted] #5
Pace Project No.: 309918

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

U - Indicates the compound was analyzed for, but not detected

LABORATORIES

PASI-PA Pace Analytical Services - Greensburg

Pace Analytical Services, Inc.
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: [redacted]5
Pace Project No.: 309918

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
309918001	**TB-1**	EPA 8260	MSV/2514		
309918002	**TB-2**	EPA 8260	MSV/2514		
309918003	**TB-3**	EPA 8260	MSV/2514		
309918004	**TB-4**	EPA 8260	MSV/2514		
309918005	**TB-5**	EPA 8260	MSV/2514		
309918006	**TB-6**	EPA 8260	MSV/2514		
309918007	**TB-7**	EPA 8260	MSV/2514		
309918008	**TB-8**	EPA 8260	MSV/2514		
309918009	**TB-9**	EPA 8260	MSV/2514		
309918001	**TB-1**	ASTM D2974-87	PMST/1273		
309918002	**TB-2**	ASTM D2974-87	PMST/1273		
309918003	**TB-3**	ASTM D2974-87	PMST/1273		
309918004	**TB-4**	ASTM D2974-87	PMST/1273		
309918005	**TB-5**	ASTM D2974-87	PMST/1273		
309918006	**TB-6**	ASTM D2974-87	PMST/1273		
309918007	**TB-7**	ASTM D2974-87	PMST/1273		
309918008	**TB-8**	ASTM D2974-87	PMST/1273		
309918009	**TB-9**	ASTM D2974-87	PMST/1273		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: of 1298258

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information
Company: URS Corp	Report To: James Pinta JR	Attention: John Smelko
Address:	Copy To: John Smelko	Company Name: URS Corp
		Address:
Email To: James_Pinta@urscorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: 412-503-4602 Fax:	Project Name: [redacted] #5	Pace Project Manager:
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER _____

Site Location: STATE:

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COLLECTED: COMPOSITE START TIME	COLLECTED: COMPOSITE ENDGRAB DATE	COLLECTED: COMPOSITE ENDGRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	PA SAFER LIST DIESEL	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 309918
1																					
2	TB-1	SL		5/12/09	1:55PM														X		001
3	TB-2				2:15PM														X		002
4	TB-3				2:25PM														X		003
5	TB-4				2:35PM														X		004
6	TB-5				2:43PM														X		005
7	TB-6				2:53PM														X		006
8	TB-7				3:00PM														X		007
9	TB-8				3:05PM														X		008
10	TB-9			↓	3:15PM														X		009
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
		5/13/09	1:56pm		5-13	1:56	
		5-13	3:15	C Mowery Pace	5-13-09	3:15	5.2 Y N Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: James Pinta JR

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 5/12/09

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev 07, 15-May-2007

CABOT-EPA 007942

DIM0206031

DIM0206178

Sample Condition Upon Receipt

Pace Analytical

Client Name: URS Project # 309918

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other _____

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other Foam

Thermometer Used (3) 4 Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 5.2 Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Comments:

Date and initials of person examining contents: Dan 5-13

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.	
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.	
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.	
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.	
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.	
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.	
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.	
Sufficient Volume:	☑Yes ☐No ☐N/A	8.	
Correct Containers Used:	☑Yes ☐No ☐N/A	9.	
-Pace Containers Used:	☑Yes ☐No ☐N/A		
Containers Intact:	☑Yes ☐No ☐N/A	10.	
Filtered volume received for Dissolved tests	☐Yes ☑No ☐N/A	11.	
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.	
-Includes date/time/ID/Analysis Matrix: SL			
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed Dan	Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.	
Trip Blank Present:	☐Yes ☑No ☐N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A		
Pace Trip Blank Lot # (if purchased):			

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Raelyn Sylvester Date: 5/13/09

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

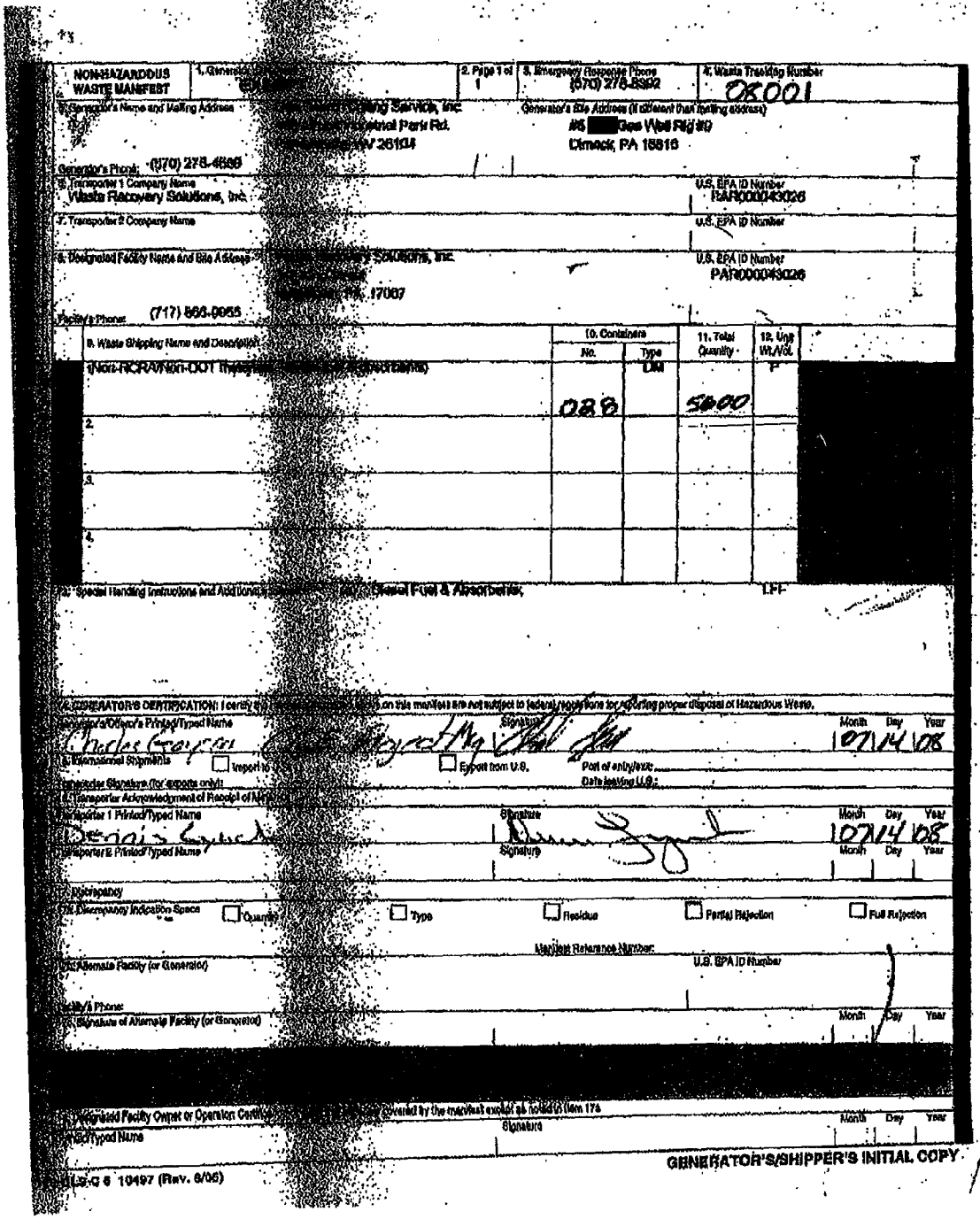
F-ALL-C003-3, 11September2006

CABOT-EPA 007943

DIM0206031 DIM0206179

APPENDIX D

DISPOSAL DOCUMENTATION RELEASE CLEANUP MATERIALS



NON-HAZARDOUS WASTE MANIFEST

1. Generator ID

2. Page 1 of 1

3. Emergency Response Phone (570) 278-8302

4. Waste Tracking Number 08001

5. Generator's Name and Mailing Address [redacted] Drilling Service, Inc. [redacted] Industrial Park Rd. [redacted] 26104

Generator's Site Address (if different than mailing address) #6 [redacted] Gas Well Rig #9 Dimock, PA 18816

Generator's Phone: (570) 278-4600

6. Transporter 1 Company Name: Waste Recovery Solutions, Inc.

U.S. EPA ID Number: PAR000043026

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address [redacted] Solutions, Inc. [redacted] 17087

U.S. EPA ID Number: PAR000043026

Facility's Phone: (717) 893-9955

9. Waste Shipping Name and Description	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.
1. (Non-RCRA/Non-DOT [redacted])	028	DM	5000	P
2.				
3.				
4.				

13. Special Handling Instructions and Additional [redacted] Fuel & Absorbents, LPF

14. GENERATOR'S CERTIFICATION: I certify [redacted] on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Charles Gayson Signature: [redacted] Month 07 Day 14 Year 08

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Dennis Eyrich Signature: [redacted] Month 07 Day 14 Year 08

Transporter 2 Printed/Typed Name Signature Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18b. Signature of Alternate Facility (or Generator) Month Day Year

19. Designated Facility Owner or Operator Certification [redacted] covered by the manifest except as noted in Item 17a

Printed/Typed Name Signature Month Day Year

GENERATOR'S/SHIPPER'S INITIAL COPY

EPA Form 8700-22 (Rev. 9/05)